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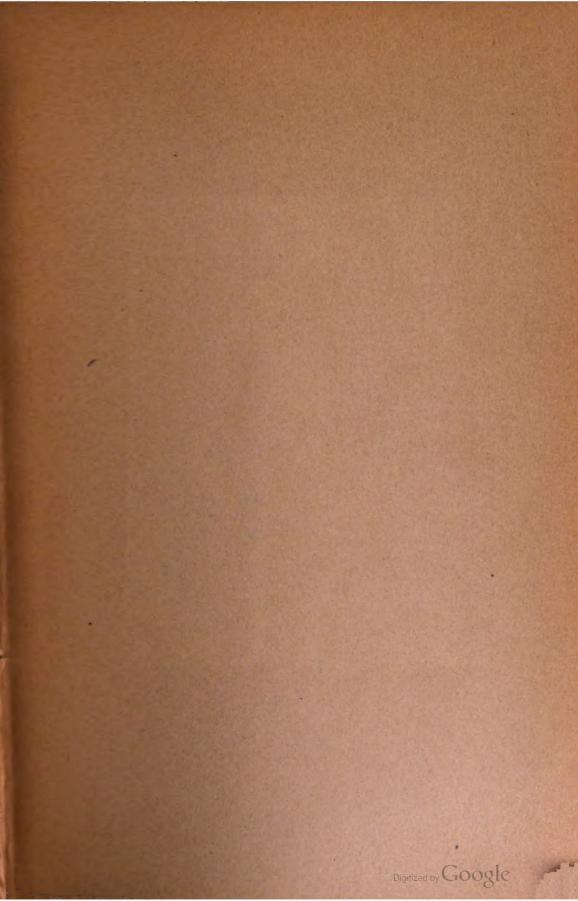
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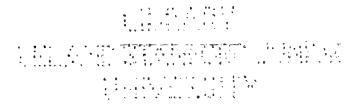
REVIEW.

Bonum est homini ut eum veritas vincat volentem, quia malum est homini ut eum veritas vincat invitum. Nam ipsa vincat necesse est, sive negantem sive confitentem.

S. Aug. Epist. ccxxxviii. ad Pascent.

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PAGAN VIRTUE.

T is a remarkable fact that the periods of history most devoid of religious belief have been invariably the most busy with moral theories. The greatest teachers of antiquity,—Cicero, Seneca, Epictetus, Plutarch, flourished at a time when all faith in the gods had well nigh vanished from cultivated minds. centuries later, in England and in France, the decline of Christianity was the signal for a fresh efflorescence of ethical speculations, and in our own times, not only does the decay of supernatural religion coincide visibly with a growing concern to determine the true laws of life, but the same men seem impelled to labor with equal earnestness to bring about both objects. None of our modern writers assumes a loftier moral tone than Harrison, Arnold, or Huxley, whilst such men as Stuart Mill, Spencer, Greg, etc., who have done so much to destroy all Christian faith, have devoted much time and thought to the reconstruction of a system of ethics on other foundations.

The reason of this is not difficult to find. However much the bulk of men may be absorbed in worldly interests, however captivating may be to the few the pursuit of knowledge or the cultivation of art, however important to all the general progress of civilization by which all are benefited, yet there is in all at least a vague feeling, and in the more thoughtful a distinct conviction, of what Matthew Arnold so loves to repeat, that "conduct makes up the four-fifths of life," that is, that it is of incomparably greater importance than all the rest put together, and that the first thing for each man to know is his duty.

Now religion, so long as it is believed in, supplies that knowledge ready-made, and no need is felt of seeking for it elsewhere, vol. xviii.—I



or striving to reconstruct it in another shape, or with other materials. Hence in the ages of faith, moral philosophy, as a science was not spoken of. The gospel was the acknowledged law of life, and its ideal characters were the saints. And so they remain to the present day with those who have kept alive the true faith in them. But to those who have lost it, the problem comes back as pressing and as perplexing as it came to the sages of antiquity, and drives them for a reply to some other source, or compels them to evolve it from the principles new or old, which they bear within them.

We know to what results their efforts have led them. Outside the Christain faith, the utmost confusion prevails in the minds of the ablest and wisest regarding the fundamental principles of the moral life. The widespread doctrines of materialism, of determinism and of evolution as commonly understood, are simply subversive of all morality. Agnosticism leads to no better results, and it is only by a series of the most ingenious efforts and happy inconsistencies that our modern guides maintain the semblance of a moral rule and a vocabulary expressive of the moral life. As to the Utilitarianism to which in one shape or another they are all ultimately led, it may be good enough as a practical rule for determining most of the duties of man; but it is only a rule, and a rule without a principle to rest upon or a sanction to sustain it, is of no practical value.

When we consider how signally the very ablest of our modern guides have failed in their voluntarily assumed task, we are less surprised to learn that many of our contemporaries craving in vain for light, yet strangly blind to that of the gospel, either lapse into the despondency of pessimism, or proclaim themselves followers of Buddha, or grasp eagerly at the phantoms of theosophy or spiritism flitting before their eyes under the attractive guise of science and mystery combined.

The attraction, happily, is not likely to be either very widespread or very durable.

But there is another ideal of human conduct more ancient and better known, which has at all times exercised a sort of fascination over the most noble and cultivated minds, and which seems still to some of those who seek for guidance outside of themselves, the safest refuge of a pure and exalted life. It is the classic ideal, made familiar to us all by the Greeks and the Romans. We know that these great peoples to whom we are intellectually indebted for almost everything, have been in particular among the greatest teachers of the moral life, and that their lessons and examples have exercised a deep influence even on Christian minds, in the course of ages. It is only natural, therefore, that those among us who,

bereft of Christian faith and eager, in the darkness that surrounds them, to catch some sight or sound which may lead them to the light, should gladly listen to the echoes which come down to them from the greatest and noblest minds of the past, and hope that what had awakened the early enthusiasm of their boyhood may still prove sufficient to show them a way through life.

It will not be without interest to consider how far such expectations may be fulfilled; what measure of providential guidance was, as a fact, vouchsafed to men outside the Jewish and Christian dispensations, what ideals they formed to themselves of the higher life, and how far they succeeded in fashioning their own lives by them; finally what even Christians may learn from those who lived and moved in the faint and flickering light of uncertain traditions and of a half-awakened conscience.

Ī.

The moral doctrines of paganism, to begin with, as understood and followed by the ancients offer such a strange mixture of good and evil, that it is impossible to extol or to censure them without manifold distinctions and qualifications. Christian antiquity, as a consequence, is divided in their regard. Those among the Fathers who looked around them and saw all that was corrupt and debasing in the beliefs and in the practices of the pagan world in which they lived, could hardly be expected to stay their indignation in order to see what elements of goodness might still be found in it. If, in the midst of their denunciations, the semblance of virtue came up before them, it was imputed to hypocrisy or to pride, whilst the better elements of pagan doctrine were held to have been borrowed from the books of the Old Testament. Others, like St. Augustine, taking a kindlier and, in reality, a more equitable view, contrived to discern, amidst the general perversion, abiding elements of beauty and truth. "If the Gentiles," he says, "had possibly something divine and true in their doctrines, our saints did not find fault with it, although for their superstitious idolatry and pride, they had to be detested. St. Paul when he said something about God among the Athenians, quoted the testimony of some of the Greeks, and this, if they came to Christ, would be acknowledged in them, and not blamed. St. Cyprian too uses such witnesses against the Gentiles." 1

The notion of there being something divine in the knowledge of the pagans, just hinted at in the above passage, comes out in bold relief in the writings of some of the early Greek Fathers. "It is clear, says Clement of Alexandria,² that the same God, to whom



¹ De Baptismo, 1., vi., c. 44.

² Strom., 1., vi., c. 5.

we owe the Old and New Testaments gave also to the Greeks their Greek philosophy, by which the Almighty is glorified among the Greeks." And again, "God is the cause of all that is good, only of some good gifts He is the primary cause, as of the Old and New Testaments; of others the secondary, as of (Greek) philosophy. But even philosophy may have been given primarily by Him to the Greeks." Earlier still St. Justin has the following remarkable passage.1 "One article of our faith, then, is that Christ is the first begotten of God. The very Logos (Universal Reason) of which mankind are all partakers: and therefore they who live according to the Logos are Christians, notwithstanding that they may pass with you for Atheists. Such among the Greeks were Socrates, Heraclitus, and the like, and such among the barbarians were Abraham, Elias, and many others. . . . Thus, then, they who have lived or are living according to the Logos are Christians, men without fear or trembling:"

To this view of God's dispensation, already suggested in some measure by St. Paul in his discourse to the Athenians and in his Epistle to the Romans, yet much lost sight of in subsequent ages, the world has been unexpectedly brought back in our own times by that new and most interesting science, the Comparative Study. of Religions. It is not too much to say that it has led the most thoughtful and most devout minds to a far broader view than commonly prevails, of God's dealings with the mass of mankind placed outside the pale of Jewish or Christian revelation. The earliest forms of all the ancient religions, they tell us, have much that is not unworthy of the true God; and though subsequently overlaid by superstition or perverted by passion, the old religions still retain noble and beautiful elements, as abiding pledges of God's providence to His less favored children, which at least served to keep them from lower depths of degradation and, here and there, to open up to them glimpses of a purer light and of a higher life. Nor would some of our modern investigators be unwilling to admit occasional manifestations of divine favor vouchsafed to them in the course of ages, such as are suggested to a thoughtful reader of the Bible by the presence of a prophet of God, Balaam, living in the midst of an idolatrous people, or of the sibyls, whose prophetic gift was commonly admitted among the early Christians and through the Middle Ages.

It is interesting to remark that long before the study of religions had developed into a science, Cardinal Newman had already reached similar conclusions. In one of his earliest works, the "History of the Arians," he wrote as follows: "We know well

¹ Apol., i., 46.

enough for practical purposes what is meant by revealed religion, viz.: That it is the doctrine taught in the Mosaic and Christian dispensations, and is from God in a sense in which no other doctrine can be said to be from Him. Yet if we would speak correctly, we must confess, on the authority of the Bible itself, that all knowledge is from Him, and not only that which the Bible has transmitted to us. We are expressly told in the New Testament, that at no time He left himself without witness in the world and that in every nation he accepts those who fear and obey Him. It would seem then that there is something true and divinely revealed in every religion all over the earth, overloaded, as it may be, and at times even stifled by the impiety which the corrupt will and understanding of man have incorporated with it; so that Revelation, properly speaking, is an universal, not a local gift."...

"The Word and the Sacraments are the characteristics of the elect people of God; but all men have had, more or less, the guidance of tradition in addition to those internal notions of right and wrong which the Spirit has put into the heart of each individual. This vague and uncertain family of religious truths, originally from God, but sojourning without the sanction of miracle or a definite home, as pilgrims up and down the world, and discernible and separable from the corrupt legends with which they are mixed, by the spiritual mind alone may be called, after the example of Clement of Alexandria, the *Dispensation of Paganism*."

He continues, "Scripture gives us reason to believe that the traditions then originally delivered to mankind at large have been secretly re-animated and enforced by new communications from the unseen world; though these were not of such a nature as to be produced as evidence or used as criteria and texts, and roused the attention rather than informed the understandings of the heathen.... Job was a pagan in the same sense in which the Eastern nations are pagan in the present day. among idolaters, yet he and his friends had cleared themselves from the susperstitions with which the true creed was beset. There is nothing unreasonable in the notion that there may have been heathen poets or sages, or sibyls again, in a certain extent divinely illuminated and organs through whom moral and religious truth was conveyed to their countrymen, though their knowledge of the Power from whom the gift came, nay, and their perception of the gift as existing in themselves, may have been very faint or defective."

¹ Arians of the IVth. Century, pp. 79-82. See also in the same connection St. Augustine, Ep. 102, and de Civit. Dei, L. II., C. 7.

II.

Without committing ourselves to all that is implied in this view, we find enough in it that is unquestionable to induce us to give the ancients a favorable hearing, and we naturally look first to that period of antiquity in which the natural man seems to have reached the highest degree of development. We refer to the palmy days of Greece, when art in its most beautiful creations, literature in its noblest and most varied forms, philosophy in its boldest flights had lifted up that wonderful little people of the Hellenic peninsula to heights which have scarce ever since been Nor are we disappointed in expecting that, from minds fertile in every other form of thought, beautiful moral teachings should come forth. No man, for instance, can lay down the works of Plato without feeling that he has gathered inspiration from them. In the brilliant pages of that great thinker he has learned afresh that the highest good is neither pleasure nor knowledge alone, but the greatest possible likeness to God; that virtue is found, not in enjoyment but in self-restraint, in the complete empire of the soul over the lower appetites; that virtue itself should be desired, not from motives of reward and punishment, but because it is in itself the health and beauty of the soul.

To Plato we are indebted for the first clear enunciation of that beautiful synthesis of the four cardinal virtues, which, embodied in the Greek philosophy and carried on to Alexandria, was canonized there by its admission into the inspired book of Wisdom, and later on became equally familiar to the philosophers of Rome and to the Fathers of the Church.

But in Aristotle was found a still greater master of the moral life. With his wonted subtleness of mind he traced back human action to its sources and followed it out in its various ramifications with such completeness and accuracy that when, after ages of Christian thought and experience behind him, St. Thomas, the most comprehensive and methodic mind of the Church, undertook to raise up a complete system of Christian ethics, he simply built it on the lines elaborately drawn out centuries before by the pagan philosopher.

Yet it is not to Greece that we must look for the highest expression or the noblest examples of the moral life among the ancients. Hers was the mission rather to train the minds and the tastes of mankind. The moral side man of had no predominance in her thoughts. Her ideal was not goodness but beauty—that beauty which comes of the highest possible cultivation of the individual, the most finished perfection of all the natural faculties. In order to find pagan virtue at its best we have to turn to the Romans.

III.

For many centuries the Romans practised the noblest domestic and social virtues without any aids beyond the traditions of their race and the dictates of their moral nature. Moral theories came to them at last only with Greek philosophy and the rest of the Greek culture.

Of those with which they then became acquainted, stoicism proved by far to be the most congenial to their national tempera-To put it in the words of Lecky: "Long before the Romans had begun to reason about philosophy, they had exhibited it in action, and in their speculative days it was to stoicism that the noblest minds naturally tended. A great nation engaged in perpetual wars in an age when success in warfare depended neither upon wealth nor upon mechanical genius, but upon the constant energy of patriotic enthusiasm, and upon the unflinching maintenance of military discipline, the whole force of the national character tended to the production of a single definite type. War, which brings with it so many demoralizing influences, has at least always been the great school of heroism. It teaches men how to die. It familiarizes the mind with the idea of noble actions performed under the influence, not of personal interest, but of honor and of enthusiasm. It elicits in the highest degree strength of character. accustoms men to the abnegation needed for simultaneous action. compels them to reject their fears and establish a firm control over their affections. Patriotism, too, leads them to subordinate their personal wishes to the interests of the society in which they live. It extends the horizon of life, teaching men to dwell among the great men of the past, to derive their moral strength from the study of heroic lives, to look forward continually through the vista of a distant future, to the welfare of an organization which will continue when they have passed away. All these influences were developed in the highest degree in Roman life."

Their expression is found scattered more or less abundantly through the classical literature of Rome. But, if we would have it in all its power and completeness, we must take up the philosophical works of the period. The best known to our readers are doubtless those of Cicero, especially that beautiful code of moral duties, De Officiis, drawn up for his son, so elevated in tone and pure in teaching, that when, centuries later, a bishop and doctor of the church, St. Ambrose, undertook to lay down a plan of life for his clerics, he saw nothing better than to adopt the name, the outlines and many of the wise and noble counsels of the great Roman orator.³



¹ European Morals, i, 181.

¹ V. De Officiis Ministrorum, passim.

Yet to find the stoical inspiration at its highest, we have to come down to the writings of Seneca, to the reported discourses and sayings of the slave, Epictetus, to the meditations of the Emperor Marcus Aurelius, and in a less elevated, but perhaps more persuasive form, to the "Lives of Great Men" and the "Moral Essays" of Plutarch. Few writers, if any, have impressed their views of human life and duty more deeply than Plutarch on the three last centuries. And the influence has been, on the whole, most healthy and invigorating. His counsels, it is true, though full of experience and practical wisdom, are little calculated to beget enthusiasm. But his "Lives" make up abundantly for the deficiency. They exhibit and awaken, especially in the youthful reader, a keen appreciation of moral merit, and it is much to be regretted that a book which all boys delighted to read in former times should be known to so few in the present generation.

The others do not deserve less to be carefully studied. "Whatever may have been the dark and questionable actions of Seneca," observes Farrar,1 "it is certain that, as a philosopher and as a moralist, he furnishes us with the grandest and most eloquent series of truths to which, unaided by Christianity, the thoughts of man have ever attained." The purest and most exalted philosophic sect of antiquity was "the sect of the Stoics," and stoicism never found a literary exponent more ardent, more eloquent, or more enlightened than Lucius Annæus Seneca. So nearly, in fact, does he seem to have arrived at the truths of Christianity, that to many it seemed a matter for marvel that he could have known them without having heard them from inspired lips. He is constantly cited with approbation by some of the most eminent Christian fathers. Tertullian, Lactantius, even St. Augustine himself quoted his words with marked admiration, and St. Jerome appeals to him as " Our Seneca."

Nor does Epictetus deserve less praise. His teachings and his examples are among the noblest that have come down to us from antiquity. The "Manual," in which his principal teachings had been set down, enjoyed a widespread popularity from the earliest times. It was resorted to by thoughtful Pagans for inspiration and guidance in about the same way as the "Imitation" is by Christians. Indeed, the early Christians used it freely themselves, paraphrases of it were written for their use, and, in modern times, the great St. Charles Borromeo, his historian tells us, carried it about with him for several years, as if to show what even one striving to be a saint might still learn from a Pagan. And, indeed, nowhere could he find many of the fundamental maxims of the

¹ Seekers After God, p. 5.

higher life more strongly emphasized; -independence of external goods, detachment, singleness of purpose, endurance and selfdenial (abstine et sustine.) And if a picture of all that were necessary, where, outside of the Gospel and St. Paul, could he find it more vivid and more truthful than in the portrait of the perfect philosopher, or the "cynic," as he calls him, drawn by the hand of Epictetus himself. "The cynic," he says, "is a messenger sent from God to man to show them the error of their ways about good and evil, and how they seek good and evil where they cannot be This missionary has neither country nor home, nor land, nor slave; his bed is the ground; he is without wife or child; his only mansion is the earth and sky. It must be that he suffers stripes, and that, being beaten, he must love those who beat him, for he is at once the father and brother of all men. He must be perfectly unembarrassed in the service of God, not bound by the common ties of life, nor entangled by relationships, which if he transgresses, he will lose the character of a man of honor, while if he upholds them, he will cease to be the messenger, the watchman and herald of the gods."1

To such lessons the emperor, Marcus Aurelius, could find little to add, save the accent of unfeigned modesty, not to say humility, which pervades the "Meditations," where day after day, during a dreary campaign he deposited his most secret thoughts. But his great lesson to future generations was to have united for years the possession of unlimited power with a pure, unselfish, and devoted life.

The limits of our article forbid us to describe with more detail the teachings of this great school of natural virtue, nor indeed is it necessary, inasmuch as they are easily accessible to all our readers. Besides being summarized in every history of philosophy, they may be found beautifully set forth in Lecky's "History of European Morals," and still more recently in Canon Farrar's "Seekers After God." But nobody interested in the question can dispense with studying them in the original writings to which we have referred, and we venture to say that very few books will so abundantly repay the thoughtful reader for the time and labor he may bestow upon them.

There is one thing which he can properly understand in no other way, and that is the enthusiasm awakened by these remarkable works at the period of the Renaissance; how in that transient re-

⁴ Arrian, iii. 22.

² We may add the deep and, we might say, Christian sense of the nothingness of worldly objects. "Soon, very soon thou wilt be ashes, or a skeleton, and either a name or not even a name, but name is sound and echo. And the things that are much valued in life are empty and rotten and trifling." See translation by Long, and Farrar, op. cit-

suscitation of pagan tastes and pagan thought, men were more moved by the lessons of the ancient philosophers than by those of the gospel, and how, down to the present day, the pagan ideal of virtue continues to exercise a veritable fascination over minds on which faith has lost her hold, or whose temperament responds more easily to the stern mandates of stoicism than to the gentle and persuasive accents of the Christian law.

Yet stoicism, like all other human attempts to formulate a rule of human conduct, is, even at its best, very incomplete and very imperfect. "You can teach nothing," objected Lactantius, "because you are sure of nothing." And so it was with regard to some of their most important doctrines. These great teachers were mostly speculative, tentative, conjectural; they lacked assurance. Again they neglected whole aspects of human life, and misunderstood and misinterpreted others. Finally what is most valuable in their precepts has to be collected from among many more that are commonplace and worthless, or weak and artificial, or positively wrong; so that only those who are guided by another and a more searching light can separate the pure grain from the chaff. But what stoicism most failed in was motive. True it appealed to some of the highest impulses of human nature; self respect and the sense of duty. But the highest motives are not ordinarily the most powerful, and a moral system, to govern society, must accommodate itself to common characters. The old notions of the responsibility of life following a man through the portals of death and determining his future had well nigh vanished from the minds of the stoics. They had little if any belief in any kind of after life, and their very notions of that God whom they so often named were of the haziest kind. No wonder that, whilst acting powerfully and with the happiest results on a narrow circle of disciples or readers, they utterly failed to reach the multitude, and that their beautiful speculations live in history only as a monument of what the mind of man may rise to in the moral order without a corresponding power to lift up mankind to its level.

IV.

This leads us to examine the next question,—the practical extent of pagan virtue. For virtue is a product not of the mind but of the will,—not a theory, but a form of action and life.

The question is then how near pagan life in its best representatives came to the high order of virtue which constituted the pagan ideal.

Some may be tempted to look, for an answer, to abstract principles, viz., to their theological conceptions of the weakness and wickedness of the natural man. But for various reasons such an appeal could lead to nothing.

1. For, first of all, the power for goodness of the natural man is a very indefinite quantity. That, in the great mass of mankind, it is painfully weak and faltering, we all know from daily experience, no less than from the traditional teaching of the Church. But it varies from one man to another, like all the other qualities of body and soul. From the very beginning of life, goodness reveals itself abundantly in some, whilst in others it is almost entirely absent, and the little that shows itself is weighed down and dwarfed by a heritage of vicious propensities. We can well conceive how favorable surroundings, wise lessons and examples of virtue combined together and acting on a naturally good and gifted soul, may lift it up to a high order of natural virtue. This is no mere fancy. In our daily experience we meet persons at every period of life showing scarcely any of the humiliating traits of our fallen nature. They are instinctively and without any seeming effort, upright, truthful, kindly and pure. An innate horror of what is evil strengthens them against ordinary temptations, and in cases of greater peril they seem ever equal to the emergency. Yet they may not be Christians. Missionaries have found such people in the midst of paganism, waiting as it were, for the higher gift, and accepting it at once as a something congenial to their whole nature.

True all this may be the work of grace; but are we sure that it is so in all cases of the kind, and that the gifts of nature, even where bestowed most lavishly, would be unequal to such results?

2. However that may be, grace once admitted as a factor in the life even of a pagan—and it is the common teaching of theologians that help from above is never wanting to those who need it—there is no reason à priori why it may not come in such abundance as to raise up such a life to the highest level of natural goodness. And if, in addition to this, we remember that according to the opinion of some of the best thoologians, there has always been a possibility of Divine faith for many outside the pale of Jewish or Christian revelation, we are free to admit when we seem to light upon them, cases of a high order, not only of natural, but even of supernatural virtue.

We are thus brought back to consider the question purely as a question of fact, entirely dependent on historical evidence. But, from the nature of the case, this evidence can only be of a very imperfect kind. For it seems equally true of all times and of all phases of civilization, that what is best in human nature is comparatively unnoticed. And doubtless it has been especially so in that portion of humanity which never had been reached by more

¹ See St Thomas, *De Veritate*, quæst. xiv., art. 11, and Sum. 22, 9; ii., a 7 ad tertium.—Lugo. de Fide, *Disp.*, xii., No. 51, etc.

than a few lost rays of revealed truth. We get a passing glimpse in the narratives of the Old and New Testaments of good and worthy men in such conditions. But how many more must have crossed the scene of life leaving no record behind them! We have therefore to be satisfied with those whose names and deeds have come down to us, and our judgment of them must be qualified in various ways, for many are known only under a single aspect of their lives, or by a solitary deed, and when the whole man is presented to us, we have still to ask ourselves whether the portrait is true to nature, or idealized by the imagination of the historian.

But taking the presentation as it stands, it gives rise to the following remarks:

- 1. Single traits of character of the noblest and most beautiful kind abound, as all know, in Greek and Roman history. There is not a virtue known to the ancients which has remained an idle speculation among them. Courage, love of country, self command, filial devotion, loyalty to truth, reverence for the gods, every form of human goodness, such as it was understood by them finds in their history some of its highest and purest illustrations.
- 2. Not only do we find such illustrations in the shape of isolated actions, but also in the general tone and tenor of lives better known to us. Nowhere do more attractive and elevating types of character occur than in Greek and Roman history. Our classics have made many of them familiar and dear to us. The "Lives" of Plutarch in particular have introduced to us some of the noblest; and, even from a moral point of view, we feel that such names as Socrates and Marcus Aurelius reflect honor on the human race.
- 3. And yet we cannot be blind to the incompleteness of such characters: we cannot help missing the fulness of beauty which the gospel alone has imparted to human life. The typical Roman might have been upright, self controlled, capable of high efforts of self-sacrifice and ready to relinquish life rather than forsake his duty; but pity, forgiveness, chastity, reverence for the inalienable rights of manhood, to say nothing of the higher Christian virtues, were strangely wanting in him. Above all we habitually miss in him the inner principle which is the touchstone of all true virtue. "I trample on thy pride," said Diogenes to Plato, as he contemptuously trod on the rich carpet of the philosopher. "With a pride of thy own still greater," was Plato's reply. This is what so lowered pagan virtue in the eyes of the Fathers. Under the external guise of a beautiful life they detected habitually the secret working of pride and vanity. "Sometimes," says St. Augustine, "patent vices are overcome by other and hidden vices which are reckoned virtues, though pride and a weak assumption of selfcomplacency are their informing principles." That such was com-

monly the case is the conclusion to which all close students of antiquity in its moral aspects are unhappily led.¹

V.

We have confined our remarks thus far to human virtue as it is met in classical antiquity. But the modern science of comparative religion has opened up a much wider field for investigation. The sacred books of the East, long entirely unknown to the Western world, and until quite recently accessible only to a few, now lie open to all in the various translations of them which have been given to the public. We now know for the first time accurately and fully, what conceptions of moral duty guided countless generations of men, in Egypt, in Assyria, in the far East, long before Christ came on earth, and still guide at the present day the two-thirds of the human race. To any one who realizes the value of immortal souls, these doctrines have a deep and solemn interest, especially those of Brahmanism, Buddhism, Mohammedanism, three forms of religious thought in which hundreds of millions of men live and die and go before God.

We cannot attempt here to study them in detail. Suffice it to say that the religion of the Hindoos, lost to-day in the most corrupt forms of popular superstition, exhibits in its earliest phases, and in the actual teachings of the most enlightened Brahmins, the noblest and purest conceptions of God and of the moral life. Buddhism which proceeded from it is something more wonderful still, developing forms of asceticism which bear so striking a resemblance to those of the Catholic Church that they have seemed to many to be directly copied from them. Poverty, chastity, religious obedience, confession of sins, spiritual direction, corporal austerities, meditation, fasting, prayer, no single exercise of the spiritual life as understood by Christians is wanting in the system. Self-conquest and universal charity constitute its fundamental maxims. Like the Christian religion, it has its places of special devotion, its pilgrimages, its relics and its saints.²

Strange to say, the same flower of asceticism has blossomed on the stem of what is commonly looked upon as the most sensual of

¹ De Civitate Dei, lxxi., c. 16. St. Augustine reverts frequently to that same view. See it amply developed in one of his letters to St. Jerome (HI., Class, Ep. 167, N. 7, 8, 9).

² The life and doctrines of Buddha have been the object in recent times of a considerable number of writings, original or translated from various Eastern languages. We may mention, as deserving special notice, the work of Bishop Bigandet: The Legend of Gaudama, containing a most interesting account of the organization and practices of the Buddhist monks; also Abbé de Broglie, Histoire des Religions Ch. Bouddhisme. An outline of the Buddhist doctrines will be found in most of the encyclopædias.

all religions, Mahometanism. Indeed the ascetic was no more wanting than the mystical element in the complex nature of Mahomet himself. His religious enthusiasm and his personal strictness in certain matters had much to do with his success, and the twofold spirit has never ceased to belong to the traditions and practice of Islam. The Sufites, like the Buddhist monks, present the doctrine and practice of mortification, poverty, contempt of the world and cultivation of the contemplative life. The lives of the most celebrated among them bear a striking resemblance to the lives of the saints. Thus the hagiologists of Moslem tell us of one of those whose whole system of life was summed up in two maxims: Contempt of the world and trust in God. His scourgings and revilings, they add, only drew from him expressions of joy that he was counted worthy to suffer thus for God. Three things were the subject of his constant prayer: that he might never have any certainty of the morrow's subsistence; that he might never be in honor among men; and that he might see God's face in mercy at the hour of death. Such things rise to the level of the highest Christian virtues, and even if we question their strict historical truth, they still remain as undoubted ideals of a most perfect form of life.

The same may be said of the "Book of Counsels," written in the 12th century and full of the same spirit. "In reading it," says Mr. Lilly, "we are reminded at one time of the Imitation, at another of the Spiritual Combat, and again of the sapiential books of the Christian canon. The writer begins by invoking the name of God-the All-bountiful and All-merciful, essentially holy in His nature and exempt from all imperfections. . . . A confession of sin and prayer for pardon follow, conceived in a strain of intense realization, on the one hand, of the corruption of human nature as seen in the light of the divine perfections, and, on the other of the illimitable mercy of God. 'Thou doest only good. We have done very wickedly. Every instant of our existence has been marked by new faults. We have never once obeyed Thy laws with a heart entirely submissive and content. A fugitive slave I approach Thy gate. Shame hath covered my face. But Thou hast Thyself commanded Thy servants not to give themselves up to despair. Thou shall purify me from my sins before Thou turnest me to dust.' The fifth chapter treats of the battle which must be delivered to inordinate affections and corrupt inclinations, and celebrates the excellence of voluntary poverty, to which nothing is preferable, of obedience, of mortification, of detachment from all created things, the indispensable instrument of true and lasting felicity.

¹ Ancient Religion and Modern Thought, p. 174.

"The whole chapter might have been written by a disciple of St. Francis. The following, on the advantages of silence, is worthy of a Trappist. Indeed the whole book is full of the deepest maxims of spirituality and the most elevating thoughts; in fact, by the virility, the simplicity, the directness and dignity of its tone, it deserves a high place among the Manuals of Piety."

Here again we are not concerned in the present connection to know whence came such noble inspirations. Whether they were the outcome of naturally religious minds, or a lesson taken from the pages of past or contemporary Christian life, or a direct gift of God to His less favored children, it matters not; as a fact, we find them there—pure and bright ideals in the midst of Mohammedan corruption.

And, as happened in the religion of Buddha, the principles of asceticism led to the creation, among the Mohammedans, of the monastic life. Mohammedanism has its religious orders in great number and variety, with their distinctive doctrines and practices. It has had its religious heroes, its saints, men who strove earnestly to follow the "counsels" and with such success that their influence in life and after death has been one of the greatest religious forces in the world of Islam. Nobody can read books of eastern travel without meeting frequent and striking instances of the devotion of which they are the objects. Their lives, written for popular edification, closely resemble those of our saints, being mostly composed of striking events, providential leadings and miracles wrought in their lifetime or after death, whilst their remains, over which costly monuments have often been erected, are visited year after year by thousands of devout pilgrims.

VI.

It remains for us to point out briefly the conclusions which are suggested by the facts on which we have dwelt in the foregoing pages. It follows, in the first place, that the nations of the earth have not been so forsaken of God in the course of ages as is generally supposed. In many particulars they show themselves our equals; and however much their speculative doctrines may have sunk beneath the level of divine, or even of natural truth, at least they have left behind them noble examples to imitate and moral teachings not unworthy of a true and divinely taught religion. It cannot indeed be denied that their teachings have neither the authority nor the sanction of the Gospel; yet there is sometimes in them a force and a freshness which we miss in the more familiar, because oft repeated forms in which we have learned our moral duties. The human conscience like the human ear, catches more readily unaccustomed sounds, and the voice of nature as it comes from

the depths of ages and from the ends of the earth, proclaiming the same law as is heard around us and within us, gives to the latter a new power and efficacy. A wise maxim of Seneca can add nothing to the corresponding truth in the gospel, yet it makes us feel that truth more deeply, if only by showing that before revealing it through Christ, God had already revealed it to the human heart.

This is especially true of certain moral lessons of a more unwelcome kind, and against which the human spirit is ever up in arms. We refer to those which constitute what is commonly called asceticism. To asceticism the modern mind is openly hostile. It is looked upon as an arbitrary interference with the natural happiness of man, a cloud drawn over and darkening the brightness of life, a sort of superstitious practice born of ignorance and unworthy fear which fortunately the world has outgrown. The great mass of Protestants have discarded asceticism as a theory and practically banished it from their lives. Many Catholics are little removed from them in that respect. Voluntary privation, corporal austerities, self-restraint in any form, save to avoid sin, comes to them as something strange and meaningless. Yet asceticism has never been confined to the Jewish or Christian dispensations. It has its place, as we have seen, in all the great religious doctrines of the past, and it continues to flourish wherever a belief in them has survived. It mingles with the abstract speculations of Pythagoras and with the poetic fancies of Plato. It is a law of the stoic phi-It breaks forth in the heart of Moslem as a protest against the sensual tendencies of the Koran, and raises up among the followers of the prophet types of a purer and worthier life. It is the very essence of the religion of Buddha. Fasting, silence, restriction of all the senses, voluntary obedience, a perpetual sacrifice of the feelings and of the will, are to the hundreds of millions of the disciples of Gautama, the normal means of spiritual progress. Surely a universal and abiding fact like this points to a condition of human nature and to requirements beyond what is recognized by contemporary thought, and gives a strange and unexpected emphasis to the austere teachings of the Gospel and of the Saints.

The lessons of "pagan virtue" go farther still; they lead us directly to Religion. The secular spirit of our day would fain discard religion altogether, or merge it in morality. To the adepts of positivism and agnosticism, religion is only an idle and curious speculation; conduct alone is important, and to deduce its laws from the facts and experiences of life should be our only concern. But what if the experience of life claims something beyond? or to put it in the words of one of the ablest exponents of modern thought: "Can then religion mean no more than that we should

¹ Seeley, Natural Religion, p. 133.

pay our debts, keep our engagements and not be too hard on our enemies? For nothing more than this have so many temples been built, so many psalms been sung, so many penitents retired from the world, so many saints and prophets wrestled with their own souls, so many martyrs sacrificed their lives? Would that invisible choir be satisfied now with the fruit of its labors could it but see mankind made moral, the planet inhabited by well-behaved people, with their passions under control, leading intelligent and reasonable lives? And this result once attained, would the world be absolved from all religious duties for the future? Will the civilized community of the future, furnished with the school and the press, see without concern the euthanasia of religion and look back upon its historic splendors as at the mere transient sunrise of a calm day?"

The answer comes back from the ancient world and from all races of men, in lowest whispers and loudest tones, in prayer, in sacrifices, in deeds of atonement and in mystic contemplation, as in so many divers tongues, all expressing the same need of something more than virtue—holiness—intercourse and union with God. The religious, or as some choose to call it, the mystical element is therefore neither local nor accidental; it is one of the fundamental, constitutive elements of human nature, ever varying in expression, form and measure, yet ever pointing in the same direction and leading to the same end.

And yet, whilst thus revealing the essential needs of the soul, the purely human doctrines of the past prove utterly inadequate to satisfy them. We admire its beautiful teachings, but from what a mass of errors we have to extract them, and when all have been put together, how much is still missing, as we have seen, to make a perfect law of life? And of what was seen and set forth by prophet or sage, how little reached the ears of the multitude? how much less still got hold of their hearts? Simply to tell men what is virtue and to extol its beauty is insufficient. In Christianity alone, in the Gospel, do we find the highest moral doctrines brought down to the level of the humblest minds. In the true Church alone do we find a large popular movement toward the higher virtues. A Catholic cannot study her history and her life without being proud to belong to her. But if he would intensify the feeling and carry it to its full height, he must look outside, follow those of his race who have had to go through life bereft of divine guidance, watch their outstretched hands and tottering steps as they reach outside themselves for what their conscience, though awakened, is unable to supply. Then indeed will he feel sweetly compelled to kneel in adoration and thanksgiving for the bright, steady and unfailing light in which it has been his privilege always

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to live. Quia non fecit taliter omni nationi, et judicia sua non manifestavit eis.

But at the same time he will be stirred up to a healthy emulation. With his superior knowledge and enlightenment, he cannot consent to fall short of the measure of virtue which in so unfavorable circumstances others contrived to reach. With the tender exhortations and the solemn warnings of the Gospel ever in his ears, he cannot think of being less strict with himself, less watchful, less self-denying than pagans have been. Pagan virtue has to be for him, as it is in the Gospel, not the term but the starting point: Nonne et ethnici hoc faciunt?

It has to be his starting point too as a foundation on which the whole structure of the higher Christian life should be built. For pagan virtue, when genuine, is but human virtue unenlightened by the Gospel, and it is on the fundamental rectitude of the natural man only that the work of grace can stand. What would Christianity be in a soul from which justice, truthfulness, self-command and self-restraint are absent? What supernatural virtues could make themselves at home in a selfish heart? What fruits of the higher life could ripen in a soil devoid of the warmth of human kindness? Energy, courage, devotion to duty, patience under trial, contempt for petty objects, a readiness to merge all personal interests in a noble cause, what are all these but the old Roman pagan virtues, and what life is anything but contemptible without them? This is why our forefathers loved to place youth at the schools of the ancients; not merely to put them in contact with the most exquisite forms of literature and art, nor yet to make them feel the universal radiance of fresh life to be found in no other period of history in the same degree, but that they might imbibe something of the lofty thoughts and generous aspirations and noble impulses of the great men of Greece and Rome, and that in their turn they too might some day prove themselves men.

J. Hogan.

A BABY'S FOOTPRINT AND OTHER VESTIGES.

HERE are not many signs visible that reviews and magazines intend to grow at all remiss in honoring with their monthly tributes the genius of Darwinism. We find it to be quite otherwise. New subjects of investigation are constantly being brought up, and the conclusions which are deduced point ever in the same direction, with the fixity of a scientific fatality. It is not so much the general theory of the descent of man from brute beasts that absorbs the attention, and consumes the labor of investigation spent upon the matter. The truth of that theory is taken for granted; it is transcendental; long ago it was settled. Nearly twenty years ago, the denial of evolution could be treated with disdain, "as not worth serious consideration." How much more so now! Hence the contributions of all investigators, whether regular or intermittent, professional or amateur, are brought to bear upon the theory, as illustrating it; they merely bring to light multitudes of diverse facts, which afford corroborative illustration.

It is very necessary to take note of this. For, without this precaution, the candid inquirer or casual reader, who perused any of the contributions to the literature of this subject, might possibly be discouraged from ever addressing himself to the question again. The crudities of thought which are distributed over matters of observation, the levity of logic which is applied to facts, themselves most commonplace and scarcely worthy of being offered to the public as the outcome of "research," are apt to throw the candid mind back into a consciousness of inability to comprehend,—a consciousness of being unable, perhaps, to do any justice whatever to a question, wherein, if it is correct in understanding anything at all, it can discover only puerility, levity and shallowness, as well in the facts adduced, as in the assumptions originally made and the deductions finally drawn.

One review of high standing permits a physician to show how the footprints of a very young infant exhibit the vestiges of arboreal habits in its ancestors; and again, how the child's grip substantiates the same conclusion.² The last August meeting of the British Association for the Advancement of Science presented quite an animated scene on "monkey day," when, in the Anthro-

¹ Prof. Huxley, "On the Study of Biology."

² The Nineteenth Century, May, 1892, and November, 1891; Dr. Louis Robinson.

pological Section, the same doctor entertained his admiring listeners with further particulars of his admirable researches. Other magazines have been taking note of an examination into the language and talk of monkeys, as conducted by an R. L. Garner; and this erudite scientist, having now made the acquisition of knowing and understanding the same language, publishes a book on the "The Speech of Monkeys." A lady quite in sympathy with the advance of such enlightenment sends to a magazine her own account of a marmoset. She gives the monkey words for "Come," "Danger!" "Save me!" "I want something," etc. She tells us that, a hundred years ago, the chatter of the tiny marmoset was reduced to translatable articulate language by a French writer, who published a book on the subject. From these and other facts it appears that, whether or not there are very exceptional varieties in the world of monkeys, apes and baboons-"sports," they are technically called—there are certainly not a few "sports" in our own human kind, exempting neither occupation nor sex from the law of morbid variation in science and sense.

It is well known that the whole scientific theory in question has been based from the beginning on the existence in organic beings of a universal analogy or likeness, which is certainly quite demonstrable. Hence the theory has also been proposed as demonstrable, that, given a resemblance between two or more beings, their origin must have been the same; and, given a universal analogy in all organic nature, all organisms must have had the same origin, either descending from the same, or somehow from one another. Thousands of years ago this argument had been used by Anaxagoras. But then the application of such premises to draw such conclusions was sporadic; nor had it to wait for Christianity to weed it out of philosophy. Aristotle could see that resemblance between beings did indeed mean a plan common to them. But oneness in the plan did not, of necessity, mean a mutual or common descent of one species from the other, or of all from an identical stock. One plan meant one mind to conceive it and to execute it. Nevertheless, this identical theory of the fortuitous growth of organisms, with functions and uses proceeding fortuitously, is the deliberate culture to-day of exact scientific thought. The fund of demonstrative proof is still the same as that which Darwin invested in the enterprise. It is the likeness of all organisms in certain fundamental principles, and the bare possibility that individual variations may have originated all the profound specific distinctions.

The state of mental conviction arrived at in the course of demonstration is not yet so absolute, but that "belief" may be

allowed some play, and is judged to be quite consonant with the exactions of strict science. In fact, it is candidly urged in favor of "belief," that it is all we can bring to bear upon the subject. and therefore belief is conviction. So Mr. Romanes says in the last section of his very latest work.1 These are his words: "In popular writings, we often find it taken for granted that any scientific doctrine is then only regarded as scientific when it is demonstrated." We must admit that we had been laboring under this impression. He goes on to warn us that, although "we should ever strive for the attainment of better evidence, scientific caution of such kind must not be confused with a mere ignorant demand for impossible evidence." Then he proceeds: "If, as Bishop Butler says, 'probability is the very guide of life' (Yes, of life!) assuredly no less is it the very guide of science; and here, I submit, we are in presence of a probability so irresistible that to withhold from it the embrace of conviction (!) would be no longer indicative of scientific caution, but of scientific incapacity." This pathetic pleading, translated into common language, signifies that since he, a capable scientist, has devoted 437 pages to the proof of Man's Mental Evolution, without succeeding in proving it, and without hope of doing any better, if you will not accept it after all that, and believe it with an absolute conviction of its truth. you are scientifically incapable.

This only means that we must accept the word of his authority for it. We are glad to find that some men's word has value; for by adducing a few scientific authorities we may escape the charge of incapacity. From our own fund, however, all that we crave to use is what cannot be ungraciously refused even to the scientific "layman"; and that is a little philosophy and logic, or what we may call some philosophical criticism on the merits of the case.

I.

Most of the lines of special investigation, or, as we should rather call it, of very general illustration of evolution, converge to-day on the human infant as an intermediate term in the progress of specific development from the brute up to man. In whatever direction we look, we find the hapless infant pursued and held down as an indispensable intermediary between man and the brute. It used to be the savage who enjoyed the exclusive right of entertaining science, as at a half-way house. But his demands have proved exorbitant; and the infant, a poor, harmless creature who cannot speak for himself, has been installed along with him. The savage has shown himself so hard-headed, his brain is so

¹ Mental Evolution in Man, ch. xvii., p. 437.

big, and altogether his frame is so far gone in humanity, that a gentle complaint is now being raised, and a longing expressed for the genuine savage, who—it is plaintively put—is fast disappearing from the world. Thus one specialist expresses himself: "In Africa, as well as in Asia and America, native races are in danger of losing their primitive characteristics, if not of total or partial extermination, and there the anthropologist and naturalist must take the earliest possible opportunities for their researches." It is difficult to do justice to the simplicity of such a complaint, as if Darwin, Tylor, Lubbock, the most eminent of observers, had not exhausted this field during the past forty years! Oh, no! We must photograph the semi-brute savage, we must phonograph him, but above all first catch him, before he disappears from the world!

Since competent authority induces belief, and, according to Mr. Romanes, belief is scientific conviction, let us listen for a moment to the most distinguished of authorities, speaking at the last Anthropological Congress in Vienna. Professor Virchow spoke thus on the occasion:

" Since the Darwinian theory of the origin of man made its first victorious mark, twenty years ago, we have sought for the intermediate stages which were supposed to connect man with the ape. The proto-man, the pro-anthropos, is not yet discovered. For anthropological science the pro-anthropos is even a subject of discussion. At that time, in Innspruck, the prospect apparently was that the course of descent, from an ape to man, would be reconstructed all at once; now, we cannot even prove the descent of the separate races from one another. At this moment we are able to say that, among the peoples of antiquity, no single one was any nearer to the apes than we are. At this moment, I can affirm that there is not upon earth any absolutely unknown race of men. The least known of all are the people of the central mountainous district of the Malay peninsula; but, otherwise, we know the people of Tierra del Fuego quite as well as the Esquimaux, Bashkirs, Polynesians, and Lapps. Nay, we know more of these races than we do of certain European tribes-I need only mention the Albanians. Every living race is still human; no single one has yet been found that we can designate as simian or quasi-simian. Even when, in certain ones, phenomena appear which are characteristic of apes, e.g., the peculiar ape-like projection of the skull in certain races, still we cannot say that these men are ape-like."

The savage being thus found an unconscionable truant, the innocent baby has been impounded. He is the nearest human being to

¹ Scientific American Supplement, August 13, 1892, p. 13,857; from Mr. John Evans, F.R.S.

what the savage ought to be, and to what the brute is. Mr. Romanes' latest work, on "The Mental Evolution in Man, or the Origin of Human Faculty," turns mainly upon this point. Dr. St. George Mivart has answered him in his "Origin of Human Reason," and in his other work, "On Truth."

The Darwinian, then, endeavors to show that there is a perfectly continuous line of development from brute intelligence to infant intelligence, and thence to the adult human intellect. By way of a frontispiece he adorns his book with a diagram, in which human life is seen parallel with lower organic life. There we may see the individual existence checked off into various stages of progress, or, into what is called "ontogeny," and "ontogenetic development." It begins at a stage corresponding to mere protoplasm, with movements only protoplasmic. Thence, an advance is made to non-nervous, and then to partially nervous adjustments, corresponding to the stages of divers unicellular organisms, and those other creatures which owe their genesis to Professor Hæckel's intuition, viz., "unknown animals." This valuable, and we might say, indispensable element, is soberly put down by Mr. Romanes: in his diagram thus: "Unknown animals, probably coelenterata, perhaps extinct." Such words would be remarkable if they were less familiar; but they can be a stumbling-block only to the feeble common mind. If the common vulgar mind cannot comprehend such terms as "unknown," "probably," "perhaps," in a solemn chart which sums up, not only dogmatically but diagrammatically, the creed of all we are to believe as the very best that has been found out, then such a feeble mind is "scientifically incapable," for want of two essential qualities in a successful evolutionist—one, that of grasping facts which are "unknown"; the other, that of gauging with accuracy their precise degree of certainty—" probably," "perhaps."

The diagram continues: The infant's life advances through no less than twenty-eight stages, before emerging into human life at the advanced age of fifteen months. During its "ontogenetic" progress it has passed successively through the somewhat slimy companionship of echinoderms, mollusks, birds, elephants, apes, dogs. And it is only by graduating through all these organic and intellectual steps of equivalence that it becomes organically and intellectually of the human kind. Now, it is argued that there has been no break anywhere in this march of equivalence, or, let us say, analogical resemblance, to various orders of the brute creation. There has been no gap whereby, at any given stage, it was separated from the next. The infant just merged into the next, or emerged. And all this was in correspondence with species in the lower creation, each individual step, or stage of "ontogeny,"

corresponding with some specific step in the general world, or, as Professor Hæckel has it, some stage of "phylogeny." Neither, when it enters on the human sphere, properly so-called, does it do so by any leap over a chasm to become a distinctively human being. Therefore the conclusion.

There is a two-fold conclusion. One was settled long ago by Professor Hæckel, when he formulated the law of "biogenesis"—that species have evolved from one another ("phylogeny"), as we see any particular organism evolving in its own individual life ("ontogeny"). The reason is, because each individual's life is an epitome of all the successive specific changes that its ancestors went through to reach the level on which it now finds itself. We pray the reader not to ask for any more reasons at present. We will excuse ourselves by alleging that it is a first principle in science, like the law of gravitation; and, of course, it is assumed by Mr. Romanes, who is busy with the other conclusion; and to that we proceed.

The other conclusion, then, is, that the infant passes from "the zero-level of mental life" to the fullness of human intelligence, and, therefore, in the infant we have "the passage from one order of psychical being into another," "without any sudden leap of progress." In short, the baby is representative of an intermediate phase of intelligence between brute and man. He ranks with the savage. It is on this thesis that Mr. Romanes, the devoted disciple of Mr. Darwin, expends a work of 439 pages.

Let us, by all means, fix our attention on the savage and the baby as representatives of "the intermediate phases of intelligence," between the brute and human creations. Our prejudices should not make us reluctant to look with a calm eye on whatever conclusions an irrefragable science enjoins. Such prejudices could be based only on certain prevalent opinions, like that laid down by Dr. Kidd, who says that, if any state "could be pre-eminently called man's natural state, it would be that of civilization," and this for many reasons. And there is another opinion widely prevalent, that every organism, no matter of what kind, is to be judged of by its normal and developed condition, not by its state of incipiency, which has no meaning, except with reference to the end towards which it is tending. It is from such opinions as these, no doubt, that the prejudiced habit of thinking is formed, which declines to look upon the infant as typical of anything, and as intelligible only in the light of his future adult manhood; and declines to regard the savage as anything else but adult man, who has degenerated from civilization, and happens to lack the opportunities



¹ Bridgewater Treatise, Introduction, & I.

of returning to that state. Hence have arisen the objections to accepting of the infant and the savage as "intermediate phases of intelligence" between themselves, truly and essentially men, and the brutes which neither degenerated from manhood nor will ever develop into it.

But, with a stroke of his pen, Mr. Romanes cancels these objections. He says that, if you insist on contrasting adult civilized man with the brute you can never prove evolution; the difference is enormous—possibly he means, it is a difference of kind; but, if you take the savage and the baby, the difference will not appear so enormous—you may pass it off as one of degree. Therefore, he takes them as intermediate phases. Let us quote his words, which are partly dogmatic and partly pathetic:

"Of course, when they (my opponents) thus ignore both the child and the savage, so as directly to contrast the adult psychology of civilized man with that of the lower animals, it is easy to show an enormous difference. But where the question is as to whether this is a difference of degree or of kind, the absurdity of disregarding the intermediate phases which present themselves to actual observation is surely too obvious for comment."

These are almost the last words of his book. The sense of them agrees perfectly with the postulate he made at the beginning of the book. That is too precious not to quote:

"It is unquestionable that human psychology, in the case of every individual human being, presents to actual observation a process of gradual development, or evolution, extending from infancy to manhood; and that in this process, which begins at a zero level of mental life and may culminate in genius, there is nowhere and never observable a sudden leap of progress, such as the passage from one order of psychical being to another might reasonably be expected to show. Therefore, it is a matter of observable fact that, whether or not human intelligence differs from animal in kind, it certainly does admit of gradual development from a zero level. This I posit as a second consideration." ²

Here then, on the threshold, he requires us to admit as a postulate what is the thesis of his whole book; that the "zero level of mental life" in the infant may be the same in kind as mere brute intelligence; and, since there is a gradual progress from that "zero level" in the infant up to adult genius, therefore mental evolution in man has been gradual from the level of the brute. Upon this postulate and three others similar in kind and in degree, both as to matter and as to logic, he "proceeds to consider, as carefully



¹ Mental Evolution of Man, p. 438.

² Ibid., p. 4.

and as impartially as he can, the arguments" to be adduced in behalf of his thesis,

It is quite superfluous labor, as he seems to imply. For these postulates create "so immense a presumption on a priori grounds," that, like other wise evolutionists, he could have postulated the whole at once, and have confined himself to merely illustrating his assumption—an occupation which would have been less ambitious and more entertaining.

Now, what has all this to do with "vestiges?" Why, on this theory, the infant is a bundle of vestiges, not only in his footprint, which Dr. Robinson will now illustrate, but in all his frame and intellectual development. The word "vestige" means a footprint of some one who has gone that way before. Here it signifies a residual trace, in the human frame and intelligence, of some stage they have passed through to become what they are. For instance, those successive stages of "protoplasmic movements," of "nervous adjustments," of "primary instincts" and the like, which Mr. Romanes tabulates in his diagram as representing an infant's psychical development, are vestiges in him of his ancestors,—what time they were only unicellular organisms, and then, later on, were "unknown animals, probably Coelenterata," and then insects, and then birds, and finally were of the dog or ape kind. mals which go by these names now are all, indeed, too far differentiated to represent exactly what the infant's ancestors were exactly. But, differentiated though they be, they stay on the given levels; and, highly evolved as human kind now is, its "vestiges" show that once it was at home down on those same levels.

II.

A Dr. Louis Robinson has contributed, as we noted before, some original researches to the "Nineteenth Century." He shows us views of a baby's footprint, and adds some views of his own intelligence. With the help of the latter he makes the former quite interesting. He finds that the soft and tender cartilages, and the very pliable joints of an infant's foot make it much more supple and limber than the foot of an adult. Hence in the footprint. which with considerable art he has stolen from the demonstrative little innocent, by the instrumentality of some unholy mixture of soap, lamp-black, syrup, and blue-black ink, he discovers certain creases, which he characterizes as remarkably similar to those of the hand. We already begin to apprehend the very recondite character of these researches. For, of course, it could never have occurred to any one before that the five toes of a foot were analogous, some way or other, to the five fingers of a hand, that the great toe and the thumb might possibly suggest a metaphorical resemblance, and that the sole and other parts of the foot were somehow homologous to the palm, etc., of the hand. If these analogies in nature had occurred to any one before, they would have stimulated only poetic imaginings. It takes a specialist of this kind to extract scientific conclusions.

He concludes that the foot is a hand. He sees the footprint, not of a foot, but of a hand which has become a foot. He reads there the "vestige" of the grasping power which that organ had when it was a hand. The creases prove it.

He lays stress on certain muscles there, called the *lumbricales*. He can find no use for them, unless they are the result of a long-continued practice of clutching twigs, when the baby's ancestors climbed trees and ran along branches. The same muscles appear in the hands. There too he fails to divine any explanation for their presence, unless it be admitted that they were the outcome of the same ancestral habits—vestiges of monkey movements. In point of fact, these muscles are very fully developed in some of the anthropoid apes, and especially in the most bulky of them, the gorilla. Could any demonstration be more satisfactory!

The grasping power of the foot is not conspicuous in adult civilized man; the organ is not remarkably prehensile. This is easily explained. Civilized man has taken to wearing stiff shoes. Just as nature has provided purely terrestrial animals, those called "ungulates," with hoofs, man has gone about "protecting his feet with a stout covering like a hoof." Here the investigator becomes irresistibly witty. In presence of this exhibition of self-mutilation on the part of man, in getting an ungulate's hoof instead of keeping his simian claw, he suggests that "we might with some justice style him an amateur ungulate"—that is, a hoofed animal by predilection.

Having been facetious, the scientist grows severely scientific. If you do not accept his explanation of the origin and use of this elaborate muscular system—the *lumbricales*—in the human hand and foot, you commit yourself to a great absurdity. What may that be? It appears that the *lumbricales* in the human hand have been called by the older anatomists *fidicinales* ("fiddle-muscles"), because they enable the violin-player to bend his fingers with great rapidity upon the strings of his instrument. Now, not admitting his explanation, you are probably one of those people who assert the existence of such a thing as design in nature (foolish people!). What design could you find here, except, forsooth, that of enabling man to play the fiddle? But this is very absurd. Hence they have merely grown, because our ancestors merely climbed trees.



¹ Nineteenth Century, May, 1892, p. 801.

This is a good specimen of the merits of this school in the matter of logic. It cultivates successively the facetious, the scientific, and the ridiculous.

There is still another point on which this reviewer dwells. It is the grasping or prehensile power in the baby's hand. It is well known that the infant tries to clutch everything. Grasping, almost as much as feeding, is a predominant passion with him. Now the physician calls our attention to the strength of the infant's grip. He tells us that a baby less than an hour old can lift himself by his hands and remain suspended on a stick or a man's finger; and that several babies of three weeks' life kept suspended thus, supporting their whole weight by the grip of their hands, during more than two minutes and a half. He challenges his readers to perform that feat of "muscular strength that would tax the powers of many a healthy adult!" Behold then in the infant a distinct vestige of his ancestor's climbing habits. Such are some sober contributions of science to the "Nineteenth Century."

Having traced these stray lines of a vestigial picture, we may as well fill up the sketch at once before beginning to animadvert upon the performance. We will take a recent summing up of evolutionary proofs from the side of anatomy. A writer has just presented to the public a rėsumė of the demonstration that man, but a short while ago, was a quadruped, and has quite recently—he does not give the date—assumed the upright posture. The title of his article is: "Man's Upward Struggle; a Résumé of the Anatomical Proofs of Our Former Quadrupedal Character."

He tells us that, in the body of the adult, the vestiges which he finds "speak quite as plainly of the comparatively recent acquirement (by the human race) of this ability (to walk upright), as do the efforts in this direction which lead finally to that power (of walking upright) in the creeping child." The child first creeps, then walks. The race quite recently went on all-fours, and now walks.

He begins to prove his point by taking it for granted—he "recognizes" it! Then upon this supposition he proceeds to build up his exposition.

"In both man and the bee," he says, "we recognize (!) the late acquirement of self-reliance and the full powers of locomotion as indicative of a higher final status in the animal scale, and as pointing to the fact that these powers have for long been of less value and lower rank in preceding generations," which only went as quadrupeds. "Naturally, if this be the fact,"—observe this formula, which is always a solid basis for further development and

¹ By Dr. Aaron; Scientific American Supplement, August 13, 1892, p. 13,856.

demonstrations, and requires no proof itself,—"if this be the fact, we shall have no trouble in finding unmistakable indications of it within the human structure. And this we find upon a very cursory examination of the case." Here the reader would do well to observe this other formula, "a cursory examination of the case." It is employed with pedantic frequency. It generally indicates, as with Prof. Huxley, that the effort to prove is simply dispensed with. How unmistakable now are the indications of the vestiges which the most cursory examination reveals, showing that, if man was a quadruped once, he has become a biped since, and that recently, we desire to place on record.

We are told that, if a bear remain on all-fours, he can with difficulty be seriously wounded by the hunter; whereas, if he assume the erect position and get up on his hind legs, as man has done, he will leave exposed, but a short distance under the surface, a number of most vulnerable points of his vascular system—the heart, for instance. Therefore, "the human vascular system, like that of our four-footed distant relatives, is best adapted for quadrupedal motion." This is the first proof of man's having been a quadruped and having become a biped, and that recently. Here the author does not remark that the habit of rearing himself erect on his hind legs is very foolish in our cousin the bear, especially when the hunter is pointing a gun at him; and that it is in strict violation of certain principles regarding the struggle for existence; and that for any quadruped to survive such reckless folly would be in violation of the principle regarding the survival of the fittest; and that, if any quadrupedal man thought of becoming a biped in such premises, he must have been killed off and eliminated long ago.

The gentleman goes on with his "proofs." There is a powerful system of ligaments required in the quadruped to bear the weight of the head projecting horizontally, and to relieve the spine of an undue strain. This muscular system is called ligamentum nuchæ, and the author describes it. Descriptions and anecdotes, be it noted, are a preponderating element in this kind of science, especially when they are irrelevant, except to the purpose of gaining credit for erudition and bewildering the eyes with technicalities. Now, he continues, the head being erect in human beings, and resting on the shoulders, needs no such powerful ligaments; and, in point of fact, they are found to be slender—sufficient, however, for the needs of the head. What does this prove? That man got erect recently. How so? Because this system of muscles "is no longer of much value in the erect position"; "unmistakable ruins of it" are found; and such as they are "they are much more atrophied in man than in the gorilla and his congeners."

Again, the whole head and face of man is remarkably different from the same part in the apes. Man's head has an enormous brain capacity; the jaws do not protrude; the under jaw is particularly small; and the jaws and teeth, and the powerful muscles for using them, which are so characteristic of certain brutes as an effective apparatus for strife, are singularly deficient in man. Now, from the remarkable difference here between man and the lower animals, let us hear this demonstrator show that man got erect quite recently: "As the weight of the head with its enormous cranial capacity increased, the lower jaw has been forced under it and nearer the spine to aid in maintaining a better balance, and thus has resulted that decrease in the size of the under jaw which is the main characteristic of the civilized countenance," and, instead of teeth to bite our enemies with, our late civilization gets a big brain which will meet the needs of war in other ways. Quod erat demonstrandum!

Shall we go on? It will be useful, for the best in the literary market of evolution is no better than this. The only point of difference between one exponent and another is that one brings a better style, or a cleverer way of cloaking fallacies, than another. The fund of logic and of facts remains the same in kind everywhere. Well, there are the molar teeth for grinding. There are vestiges of muscles for moving and wagging the ears. A lady in Philadelphia to-day can still wag hers, and has semi-simian, pointed ears besides. "She is thus seen," he says, "to be a partial reversion to an earlier type, though intellectually she belongs to the advanced ranks of her sex."

The vestiges thus far noted are either beneficial or at least harmless. There are others which are quite inconvenient, in fact, detrimental, remaining as they do when man has permanently assumed the erect posture. Had he remained horizontal, the blood would flow more regularly and safely, and some inert valves would come into play; the pumping of the blood up through one vein, and its descent through another, would be accomplished with more facility. Therefore this investigator concludes that man got erect recently. Most people have thought so too—that he has got up within the last twenty hours; and that when he is tired he will lie down again. Few persons have thought that man must be a quadruped in order to assume a horizontal posture, or that, because the whole vital system is under the strain of work while at work, man is out of his natural posture when he stands up to his business.

This is wearisome. But we will cite one "proof" more. He says: "The differentiation existing between the hand of man and the higher apes is too well known to call for more than a passing mention." That is to say, he admits as briefly as he can that they

are altogether different. Forthwith he goes on to prove their original identity from their very differences: "The human hand is a rich field wherein to search for vestiges of the change that has taken place in an organ that, but a brief period back, was equally used with the feet for support, but which is now a purely prehensile appendage." That is all he has to say, and for once we agree. The human hand, being so entirely different from the ape's claw, is a rich field wherein to search for vestiges till doomsday, if one be so inclined; there is no voucher given that any one will find them. The pleasure afforded by the occupation depends upon one's tastes. And so this learned scientific evolutionist closes his "hasty presentation," as he calls his thesis, by noting with erudite fullness that because man's hands are hands, therefore his feet are feet. His way of putting it is this: "Their (the hands') greater adaptation to the work recently assigned them (of grasping), has led to a coincident abortion of this power in the human foot (which is not usually employed in grasping), a power that is possessed in no mean degree by the monkey tribe." That is just what we had thought ourselves; hands are hands, and feet are feet, and claws are claws. But we are still waiting at the end of the "hasty presentation," as he calls his résumé of "anatomical proofs," for the original demonstration taken in hand that, whereas it is absolutely impossible for man, as he is, to go as a quadruped on the ground or on the trees, either on all-fours or on four claws, or in any other way except as a walker, he became a walker, and that recently, and precisely because, with Dr. Aaron, he was lately four-footeda prowling quadruped; while, with Dr. Robinson, he was lately tour-handed-a quadrumanous climber.

The gentleman adds: "A recent article on the 'Decline and Fall of the Little Toe," will be found interesting reading in this connection." We may follow his suggestion, when we have discussed a little the decline and fall of common sense.

III.

We are not qualified to speak at all upon the subject. Mr. Romanes tells us so expressly: "The close anatomical resemblance that subsists between man and the higher apes—every bone, muscle, nerve, vessel, etc., in the enormously complex structure of the one coinciding, each to each, with the no less enormously complex structure of the other—speaks so voluminously in favor of uninterrupted continuity of descent, that, as before remarked, no one who is at all entitled to speak on the subject has ventured to dispute this continuity, so far as the corporeal structure is concerned."

¹ Boston Medical and Surgical Journal,

² Evolution in Man, ch. i., p. 19, note.

Gagged as we are, then, we have only to let others speak; and we may slip in a word when not observed. While the "hasty presentation" given above, on a "very cursory observation," goes to prove that man's foot was once a hand, Professor Huxley's observation, as given in his book on "Man's Place in Nature," has gone the other way, and shown him that the ape's hind hand was once a foot. "The most cursory anatomical investigation," says he, proves that hind hand to be a foot. Here we have the spectacle, not altogether rare, of two evolutionists diverging, nor denying themselves the right of a very natural selection. Evolution has generally several ways to go, and sometimes it chooses all at the same time. It can go upwards, and then it is genuine ascent, or "descent of species"; it can go downwards, and then it is called degeneration, or inverted evolution; it can be divergent, and also convergent; and Professor Lloyd Morgan tells us that there is also "revolution," particularly "during hard times." These may be mixed at option in various proportions. Without pausing to give instances, we see in the present issue, about the hand having been first a foot and the foot having been first a hand, an instance of divergent evolution in logic, with a convergence towards mutual contradiction.

The ape has no foot. Neither has it a hand. It has four claws, neither more nor less. Prehensile organs they are, and splendid ones. Robinson quotes some one who calls them "grapnels." The one feature in the ape's prehensile organ which does bring it into close relation with the human hand is, we are told, the so-called "thumb"; but this again is not a genuine thumb; it is analogous to a human finger. The human thumb is without a parallel in nature. By it is secured, as Professor Huxley tells us, "the possibility of carrying into effect the conceptions of our mind."

The claw of the monkey is an organ of suspension rather than of touch; and it is not one of measure. Man's hand, on the contrary, is an organ of touch and measurement; it is, as Blainville observed, "a sensitive compass with five points." Hence, when a monkey tests anything, he does so by scratching it with his nail, not feeling it, as man does, with the tip of a finger. There are some indications in all this of a use, which to the plain mind reveals a plain purpose.

As to those ligaments, which Dr. Robinson noted had been called *fidicinales*, we are not quite reduced to the sole alternatives of the forlorn dilemma in which he ingeniously left us. He had argued that we must consider the playing of a fiddle to be the

¹ Ch. ii., p. 109.

foreordained purpose of this anatomical structure, or we must take his explanation, which seems to us slightly worse. For better, in all conscience, any purpose, than none at all; better believe that organic structures had some purpose however obscure, than that they grew-that not having any existence they used themselves into existence, and grew! His dilemma rests on the very solid foundation, that the older anatomists "called then fidicinales" fiddle-muscles. Even Professor Huxley is a little broader in his views, when he speaks of adaptations "to carry into effect the conceptions of our mind." If the modern physician has lost the cunning of his own art, as his last self-adaptation to the environment of the nineteenth century, a classical representative of his profession, one whom he honors by naming him, will inform us. "In the palm of the hand," says Sir Charles Bell, "and between the metacarpal bones, there are small muscles, lumbricales and interossei, which perform the finer motions, expanding the fingers and moving them in every direction, with great quickness and delicacy. These are the organs which give the hand the power of spinning, weaving, engraving; and, as they produce the quick motions of the musician's fingers, they are called by the anatomist fiduinales. Attention to our most common actions will show us. how the division into fingers, by combining motion with the sense of touch, adapts the hand to grasp, to feel and to compare." Quoting from Ray, Sir Charles continues: "Some animals have horns, some have hoofs, some teeth, some talons, some claws, some spurs and beaks; man hath none of these, but is weak and feeble, and sent unarmed into the world. Why, a hand, with reason to use it, supplies the use of all these."1

So, in the foot, who does not recognize, by the force of his own personal experience, that some elaborate system of muscles can alone have adapted man to the various attitudes, which are imposed upon him by the conditions of his industrial and social life, and are necessary for art as well as grace?

As to that brilliant specialistic observation that an infant wants to grasp everything, and that a baby three weeks old has such a grip as to hang suspended from a finger or a stick for nearly three minutes, it is of a piece with other foolish things which the learned physician adds, about its taking a "curled-up position," while so hanging, or while sleeping—a position which, he has sagaciously observed, the young orangs and chimpanzees affect when asleep. In fact, he feels warranted in criticizing any other posture for sleep. To rest on one's back gives rise to strange dreams; Tylor

¹ "The Hand, Its Mechanism and Vital Endowments, as Evincing Design," Bridgewater Treatise, ch. iii., p. 60.

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and others believe that man's first ideas of a spirit world arose from dreams, when people lay on their backs; hence devils were conceived, and devil-worship entered into religion, whereof some gloomy tenets to-day retain a scent of fire and brimstone. Whence he leads us to infer that sleeping on the back, in defiance of those natural laws, so admirably laid down for us by the orang-outangs and the chimpanzees, has originated the dogmas of religion, which evidently he does not like, and perhaps finds some reason in himself to fear. His words are instructive. He says:

"... It would seem as if the period during which man first adopted the *dorsal decubitus* might have been an epoch-making time in his raw theology. Devils and devil-worship might easily have originated from a nightmare; and, since even dogmas have pedigrees and are subject to the laws of evolution, it is perhaps no very wild suggestion that some of the more sombre tenets of our gentle nineteenth century creeds may owe their embryonic beginnings to the sleeping attitude of some palæolithic divine, who had gorged himself in an unwise degree with wild boar flesh."

These words may well be the last of the article. They insinuate the strong creative idea of evolution, and deserve to be put in the conspicuous place.

Nor, as we have seen, is the science unworthy of the theology. For, not to dwell on the vigorous imagination required to apprehend so many phrases, to the effect that "it is possible," "it may be," "it might be," "it could, should, or would have been," the double logical exploit is repeatedly performed of begging the whole question and of running round in a vicious circle. We have no objection to this; it is quite in keeping with the subject matter. We only give an instance or two. The physician says: "Arboreal habits, either past or present, are to be predicated with absolute certainty, if there is any truth whatever in the laws of evolutionary development." Hence they are predicated with absolute certainty, on the strength of the supposition so postulated. Then he turns round, at the end of the same article, and predicates the postulate with absolute certainty, on the strength of the arboreal habits being supposed: "The cumulative weight of such facts as the presence in the human foot of the class of the lumbricales, . . . and the persistence in the foot during infancy of many hand like characters impress on us the truth that, whatever our predilections may be, it is no longer possible to treat man as an exception in Nature's great evolutionary scheme."2

But a word more on some of the facts adduced. An infant's lips and tongue are the first organs exercised; the next motion is



¹ Nineteenth Century, May, 1892, p. 842.

² May, 1892.

that of putting the hand to the mouth in order to suck it; and, no sooner are the fingers capable of grasping anything, than whatever they hold is carried to the mouth. The first office of the hand is to exercise the sensibility of the mouth. If the child's grip is strong in supporting a weight, it is only proportionately so; that is to say, because the body which it supports is still very light. It will not be so after awhile. As Mr. Herbert Spencer tells us, the masses of similarly shaped bodies (for instance, that of the infant and that of the adult) vary as the cubes of the dimensions, whereas the strength respectively varies as the square of the dimensions. He says, suppose a creature, which a year ago was one foot high, has now become two feet high, while it is unchanged in proportion and structure, what are the concomitant changes that will have taken place? It is eight times as heavy; whereas the muscles and bones are severally but four times as strong as they were.2 Hence when a man has grown to be five feet ten inches high he can well afford to be staid and sedate; and not only be reluctant to run about as he did when a boy, but also to hang suspended on a finger, as he might have done when an infant. Yet, says this wise scientist in a stupor of amazement: "A three-weeks-old baby can perform a feat of muscular strength that would tax the powers of many a healthy adult!" What he means is that a three-weeks-old baby can give an exhibition of bodily lightness which would tax the powers of every adult, whether healthy or not, to give. We agree. It would be very difficult for a ton to pose as a pound.

In the sense then of all science, the foot of man and the hind extremity of the anthropomorphic ape are two creations distinct and independent, each complete in its kind, and perfect in its accord with the invariable laws of mechanics and statics, whereby the ape is always a climber and man is always a walker. He is the only walker in the world, bearing in his erect brow the sign of the aspirations which his reason entertains within. Other animals have four hands, or rather claws; or they have no claws, but paws; or they have hoofs and the like. Man alone is so built that he cannot go except on two feet. He can creep along, as a child is said to go on all-fours. He might go on his knees and kneel—a function, the infrequency of which in the scientific life has, no doubt, caused it to slip from the scientific mind. But by no possibility can he go as a quadruped.

If to the materialistic mind it is a scandal that there should be so striking an analogy among the species of living beings, unless

¹ Bell, *ibid*., ch. x.

² Spencer's Principles of Biology, vol. i., part ii., ch. i., p. 122.

we admit also a descent of one species from another, it is no stumbling block to the philosophic mind. All these "comparative" sciences that are waxing fat on the analogies of nature and catering to a materialistic sense, all this "comparative anatomy," "comparative physiology, or morphology, or psychology," only serve excellently the purposes of a rational philosphy; which lays it down, as the Duke of Argyle has well said, that "never in all the changes of time has there been any alteration, throughout the whole scale of organic life, in the fundamental principles of chemical and mechanical adjustment, on which the great animal functions of respiration, circulation and reproduction have been provided for. These are fundamental similarities of plan." One plan! Reasonably. For a skilful designer not only has a plan, but he does not change a good one. And, if the designer is very wise, he conceives a plan very far-reaching indeed. So has the Author of universal Nature done; He has conceived and executed a universal plan.

IV.

While the Doctor, whose researches we have just been considering, beguiled the British Association with a delicate morsel of science on the feet and hands of babies, a votary of the same school has been entertaining the monkeys in the menageries of New York, Washington, Cincinnati and Chicago; and he regales us with a sensational account of the happy issue of his mission lishes a book entitled "The Speech of Monkeys." acquired the Simian tongue. He has learned the forms of expression used by the monkeys in talking to one another, and, happy man! he has himself talked to them. After studying many varieties of monkeys, apes and baboons, the Capuchin, Rhesus, Cebus, Macaque, Java and Spider races, he has come to the conclusion that these varieties use different dialects, which by associating with one another they may acquire, but do not speak. He has said nothing about their acquisition of his own. We need not give any specimens of how these simian sounds look, when written in our vulgar alphabet. There is no assurance given us yet that the true monkey alphabet for formulating the words has been discovered. Manuscripts or palimpsests have still to be unearthed.

It may be mentioned, by the way, that the words of the apes are inarticulate. This gives the investigator a little room for the play of his imagination, which seems to have got highly developed in its way—perhaps itself the vestige "of some curious arboreal endowment." His logic does not seem to have been cultivated to the prejudice of those other special qualifications, which rendered him



¹ Reign of Law, ch. v., p. 269.

² By R. L. Garner; New York.

peculiarly fitted for his protracted investigations. Certainly, the fact of words being inarticulate has not stimulated it to any notable degree of irritability.

There is little to notice in his achievement, beyond its character of fitting into a much larger theory about thought and language, which, as Mr. Darwin duly informed us some while ago, is but a vestige of that aboriginal effort whereby wild beasts, once upon a time, aped the howls of other wild beasts and so grew into talking men. Accordingly, we shall sketch the whole theory as it stands to-day, far past the stage of evolution at which its distinguished progenitor, the founder of Darwinism, left it to the admiring eyes of his descendants; or to the allied species of evolutionists; since not all who glory in the name can be reckoned Darwin's legitimate offspring. For this theory has been sadly divergent during the past forty years. Indeed, if what has been going on in the breeding grounds of science, during only one generation, may be taken as in any sense a reliable index of the evolutionary march of nature, then it can never have required Sir Charles Lyell's millions of years to evolve all organic species from the primeval germ; since forty years have abundantly sufficed to evolve a network of systems, a whole horde of them, which are utterly irreconcilable with one another, except in their fundamental tenet of the bestial origin of man. That one tenet is a protoplasm which they have not yet disintegrated, and which, we may suppose, will continue to ferment into them, as long as they are anxious to be fermented out of it. We could not express better the idea which we are just now laboring to give utterance to, than by appropriating, with Professor Lloyd's kind permission, a felicitous sentence in which he succeeds in delivering himself of a somewhat similar conception. He says, with a sense of relief to himself and his reader:

"Or perhaps we may say, in the language of analogy, that when the germinal psychoplasm of some dim form of organic memory is fertilized by the union therewith of the more active male element of discrimination, a process of segmentation of the psychoplasm sets in by which, in process of differentiation, the tissues and organs of the mind are eventually developed." 1

We feel assured that this must be just what we mean. For the Bristol professor is so far above the level of Mr. Romanes whom he is criticizing, that, as long as he keeps hand-in-hand with Dr. Mivart, we know that we understand him perfectly, and only regret that in his new and very admirable work he ever thought it necessary "to part company" with the Catholic professor, because, as he candidly admits,—because of the philosophy which Mr. Mivart means to convey.² But enough of this prelude.

² Animal Life and Intelligence, pp. 326, and 362, notes.



Animal Life and Intelligence, ch. ix., "Mental Processes in Animals," p. 339; 1892.

Articulation is an essential factor of speech. It is conspicuous in the parrot, which repeats words that it hears. The parrot's brain is not exalted in the psychological scale; and the animal's form and anatomy are classed a long way off from those of man. This is embarrassing; for what is gained on one side, in the gift of talking, seems to be discounted for in the structural disconnection. Mr. Romanes, nevertheless, is not deterred from introducing the parrot's performances into his voluminous demonstration that brutes have the beginnings of language. He says of one with admiration: "The remarkable thing about this bird is that he does not merely talk like parrots in general, but so habitually talks to the purpose." In other quarters it is reiterated that Polly says "Good morning," when that is just what it should say; "Give me a bit!" when that is the precise idea. And so the demonstration proceeds.

Our attention is not at all forcibly called to the fact that no parrot combines even the most familiar words in new orders of construction; or constructs them at all; it only repeats and often jumbles incompatible phrases. Thus, as it seems to have a weakness for rhyme, it can reconstruct a very excellent poem out of "Sing a song for sixpence" and "I love little pussy:"

"Four and twenty blackbirds,
When they die,
Go to that world above,
Baked in a pie!" 2

We had almost expected at this point to see the rhyming propensity set forth as an "adumbration" of man's gift of poesy. We are thankful to find that poetry "in its sublime form," and in that other form commonly called Religion, is still withheld from the brute. There is no reason assigned for this reserve; but an evident reason is not hard to discover. Evolution must reserve something from the brutes; otherwise, proving too much, it will be too distinctly seen to prove nothing. However, like a true form of sublime poesy, its reasons are not always within reach of the common mind.

It is in dogs and elephants that linguistics reach their culminating point below the level of man—linguistics, not in the active sense of cultivating the art or science of speech, wherein the parrot stands supreme, but in the passive sense of being impressed by man's use of speech. Who has not seen a dog make an animated spring when saluted with a profane imprecation? The anecdotes about "Sally," one elephant, and "Siribeddi," another of the same intelligent spe-

¹ Mental Evolution in Man, ch. ix., p. 191.

² L. Morgan, Animal Life and Intelligence, ch. ix., p. 355.

cies, are decidedly interesting; and, what is more, they make the bone and sinew of many a demonstration, containing their own conclusions, and rendering argumentation superfluous. The more intelligent elephants belonging to the government in India and Ceylon are said to understand more than eighty words and phrases addressed to them by their keepers. Besides, one dog has been taught to read. Of twelve cards put on the floor, whereof one is marked with the word "Food," another "Tea," while the remainder are inscribed with other words, this intelligent creature, without being pressed to bring any cards, has generally brought the "Food" card, when it was food he wanted, and the "Tea" card, when that was his predilection.

Prof. Morgan remarks here: "No doubt, if the words had been written in Greek or Hebrew, some people would have been interested, but not surprised, to learn that a dog can be taught to understand with perfect ease these languages!" Had the experimenter, Sir John Lubbock, selected other arbitrary symbols than the printed words we employ, "no one could have run away with the foolish notion that the dog understands the meaning of these words." We may add that words can be spoken, or written, for the convenience of these animals in a language not yet known since the beginning of the world; but that does not embarrass the intelligent creatures. Mankind has long been accustomed to use different idoms in addressing these brute servants, sometimes a growl, an oath or a benediction; sometimes the application of a stick or the sign of a finger; again the pressure of the horseman's knees, or a twist of the bridle to the right or left; and various other communications of thought, not quite so recondite or specious as written words on pieces of card or pasteboard. And this just shows the amount of understanding involved in the written card fallacy. In the dog experimented on, it is the same amount which would be put in requisition to fetch his master's stick or to fetch his hat blown away by the wind; in the experimenter, it is the same amount that is required to construct any critical fallacy, which implies a false state of the question, and slips by the point to be proved.

The counting trick is of the same kind. There is a chimpanzee in the Zoological Gardens, London, which, they say, can count as far as five. When asked for two straws, for five, for one, it will manage to gather the right number. Therefore, it can count. However, until we are otherwise informed, we see no reason to doubt that, if the keeper had trained the animal by the use of algebraic symbols, or the terms of differential calculus, or the modu-

¹ L. Morgan, *Ibid.*, p. 346.

lated whistles of a horn, it would have responded quite as cleverly, and, adapting to the respective sounds or signs a certain bulk or portion of the visible objective straws before it, have carried on a definite series of muscular acts in the collecting of a definite series. and so have cast up its arithmetical sum in terms of differential calculus, or to the tune of a horn's whistle. But all this is not counting, any more than picking up certain cards, which happen to have words written upon them, is reading. Both counting and reading demand the perception of abstract relations, irrespective of the concrete objects or signs, visible to the eye. Men use visible or other signs or symbols, but only as external helps to the intuitive perception of relation—to thought; and it is only because the intuitive perception is going on within, that anything without can be a sign or a symbol. In the brute there are registrations of past experience, whether naturally acquired or obtained by training; and the external movements prompted by a repetition of the experience may appear to coincide with those which, in man, would result from his actually casting up a sum, or reading a card; but that, as far as it goes, would only prove that some man has been busy in manipulating this particular brute's experiences so that the responsive movements shall coincide, as in a puppet show, with the facts of human intelligent life. To a brute, nothing is a sign, nothing a symbol. Whatever object strikes its sense is clothed with the sensitive conditions in which it is perceived. It may be like or unlike other objects; it may be useful or hurtful; but the relations of utility or likeness do not come within the scope of sensitive knowledge, any more than the relations signified by arithmetical numbers or written words. The only bonds existing between concrete sensible objects in the life of mere sense are those existing among the sensations which they have originated, and which the sensitive memory has registered and retained. The training of animals consists in manipulating this process of organic registration, so that a certain set of phantasms shall be associated, and, when set going by an apt stimulus, shall run out into the corresponding muscular adjustments, and so run down—like a music box started on its harmonious run. Hence, we may dismiss the counting fallacy in the words of Mr. Romanes himself: "Of course, before the idea of number or of relation can arise at all, the faculty of conception (that is, of abstract thought) must have made great advances." That settles the question even for him.

And that is saying much. For with him the whole process of intellectual life is really contained in the sensitive life of brutes, with the addition of names given to the things perceived. He adopts from M. Taine a statement which pretends to define our intellectual

¹ Mental Evolution in Man, ch. iv., The Logic of Concepts, p. 72.

process of abstract thought. In the statement he finds two meanings, and he approves both. One is, that the faculty of abstract thought consists in the power of combining several sensations—he calls them "ideas"—as when a dog recognizes a wolf, though he has never seen this particular wolf before, he must have laid up a general, indeterminate, "combined" perception of a wolf. The other meaning is that the faculty of abstract thought consists in being able to form this general perception, "plus the faculty of giving a name to the resulting compound;" that is, the faculty of speech, of being able to talk. This is the process of intellectual life with him; and, of course, on such crass materialism and gross philosophy, evolution may well be expected to rise up in solid proportions and stability, even unto conviction. We are only surprised that when the demonstration is completed in 437 pages, he should beg for only "belief," in terms which we quoted at the beginning of this article. But it will be useful to quote his exact words, with their italics and capitals, keeping before our mind that by "ideas" he means sensitive perceptions:

"The real issue, then, is as to what we are to understand by this term abstraction or its equivalents. If we are to limit the term to the faculty of 'taking in and retaining together several combinations of simple ideas' (he means sensitive perceptions, sensations), plus the faculty of giving a name to the resulting compound, then undoubtedly animals differ from men in not presenting the faculty of abstraction; for this is no more than to say that animals have not the faculty of speech. But if the term in question be not thus limited-if it be taken to mean the first of the above-named processes, irrespective of the second—then, no less undoubtedly, animals resemble men in presenting the faculty of abstraction. accordance with the former definition it necessarily follows that 'we conceive the abstract characters of things by means of abstract names which ARE our abstract ideas'; and, therefore, that 'the formation of our abstract ideas is nothing more than the formation of names.' But, in accordance with the latter view, etc. In my opinion, so much has to be said in favor of both of these views that I am not going to pronounce against either. What I have hitherto been endeavoring to do is to reveal clearly that the question, whether or not there is any difference between the brute and man in respect of abstraction, is nothing more than a question of terminology."1

So, at this age of the world, we have come back to pure nominalism. "For myself," he says, "I am a nominalist, and agree with Mill, that to say we think in concepts is only another way of saying that we think in class-names."²

Thomas Hughes, S.J.

¹ Mental Evolution in Man, ch. ii., " Ideas," p. 32-3.

² P. 22.

THE IRISH CHRISTIAN BROTHERS.

THE Institute of the Irish Christian Brothers was founded in 1802, in the city of Waterford. One hundred and thirty years ago there was born in the village of Callan, in the County Kilkenny, a man whom Providence appears to have destined to effect for the boys of Ireland what Nano Nagle inaugurated for the girls. Edmund Ignatius Rice succeeded his uncle as a wealthy merchant in Waterford, but, moved by observing the neglected condition of the boys of the poorer classes, while contemplating the adoption of some form of religious life, he determined, in 1802, to establish a school for the gratuitous education of the poor. He was at first doomed to experience some delay in the execution of his laudable design. However, after being fully satisfied that the advancement of religion and morality was the great end in view, the learned bishop of the diocese, Dr. Hussey, not only signified his entire approval of the proposed plan, but moreover lent his warm co-operation, and at his death bequeathed a large sum to the institution of Mr. Rice. This gentleman now bent all the energies of his mind towards the accomplishment of his cherished object. A dwelling-house and two school-rooms were erected in Waterford, qualified masters were provided, and a kind of religious community, numbering six, was formed. Dr. Hussey was succeeded in the See of Waterford by the celebrated Dr. Power. him Mr. Rice's young establishment was an object of peculiar solicitude, and his paternal attention was daily rewarded by seeing the good fruits of the new system of instruction, and after some time he succeeded in obtaining for this little band of religious men the Apostolic benediction. In the meantime the Society advanced slowly, with increasing hopes and brightening prospects. Seven years after the first opening of the schools in Waterford many branch houses, formed on the plan of the original establishment, were in good working order in several of the towns in the south of Ireland; in fact, the community began to assume proportions which its revered founder had not contemplated. Only the solemn approbation of the Pope was now required to give it solidity and greater extension, and so, in 1819, an humble memorial to this effect was presented to His Holiness from an assembly composed of many of its members. The petition prayed for the erection of a new distinct religious order. For certain reasons this was not granted at the time.

As is well known, a religious institute, known as the "Brothers

of the Christian Schools," had already existed in France for upwards of a century. The venerable De la Salle, the founder, a secular priest of great learning and piety, had, as early as the year 1684, resigned his ecclesiastical dignities, distributed a large portion of his patrimony in charities, and, with twelve pious associates, devoted himself entirely to the gratuitous instruction of poor children. He lived to see the advancement and spread of his community throughout France, and soon after his death, in the year 1725, Pope Benedict XIII. erected the society into a religious order.

In 1818 the Archbishop of Dublin solicited the approbation of the Holy See for Mr. Rice's Institute, and for an extension of the brief granted by Benedict XIII. to the Congregation of the Brothers of the Christian Schools in France. The claims of the petition itself, supported by the approbation of such an eminent prelate as Dr. Murray, could not fail to win the consent of a pontiff who, like Pius VII., had the spiritual interest of his ever-faithful Catholic flock in Ireland so much at heart, and accordingly, on the 5th of September, 1820, the Institute was formally approved and confirmed by a brief, under the title of "Religious Brothers." The "Christian Brothers," as they are universally called, form a society perfectly distinct from that of De la Salle's "Brothers of the Christian Schools," well known in France and in the United States of America—the end, however, of both being the same, and the rules by which they are governed differing very little from each other.

The end of the Institute is stated in the Rules and Constitutions to be: "That all the members labor, in the first place, for their own perfection; and, in the second, for that of their neighbor, by a serious application to the instruction of male children, especially the poor, in the principles of Christian religion and piety." The Brothers are bound by the three religious vows of obedience, chastity, and poverty, to which a fourth is added of firm perseverance in the Institute, and a fifth, peculiar to themselves, of the gratuitous instruction, religious and literary, is precisely stated in the Papal brief, and repeatedly enforced in the Constitutions as that for the fulfilment of which the Order of Christian Brothers exists:

"The Brothers should recollect that the instruction of poor children is the great object of their Institution, and for which, through the mercy of God, the Institute has been particularly raised up. They should always teach them gratis, and content themselves with the glorious recompense promised to all 'who instruct many unto justice.'"—RULES.

Thus we see that a Christian Brother, from the outset, devotes himself as a special guardian and instructor of the children of the poor.

We all know that God might have decided that no one should enter the Kingdom of Heaven who had not taken a personal part in the struggle of good and evil in the world. But He has willed the contrary. From the creation of the world a special source of salvation has been prepared for the souls of children. In the ages which preceded the death of Christ and the promulgation of the Gospel, the children were saved in the faith of their fathers, God willing to regard them as one with them. He has opened to children the gates of innocence and merit. He has said: "Suffer the little children to come unto me, and forbid them not; for of such is the Kingdom of Heaven." And looking upon them at another time, He said: "It is not the will of your Father who is in Heaven that one of these little ones should perish." What words in a mouth whence every word was truth and efficacy. Words addressed to all, but hearkened to by so few. These are the words, we take it, that call these good men from home and friends to form a compact body, united together by common laws under a common head, and animated by a common spirit, for the attainment of a simple end, and that end one of the best to which the loftiest desires can be sacrificed or the brightest genius directed.

Ninety years have now gone by since Brother Rice, with his little band of six Brothers, commenced their good work in Waterford. How the good work has increased more than one hundred fold can be realized by the perusal of a few figures taken from the latest published returns.

The Brothers have now three hundred schools attached to eighty of their houses in Ireland alone, distributed throughout the four provinces. The Brothers forming the teaching community attached to these schools number about six hundred, not including the novices and postulants in training at their headquarters near Dublin. The following is the latest classified return of the pupils attending these schools which we have seen. It is dated March I, 1888, but it will serve our purpose in lieu of a later one not at hand:

	1	Attend	dani	ces.			
On the rolls,							33,000
Daily average for last tw	elve	mont	hs,				24,112
Present on this day,		•	•	٠		•	24,849
		A_{j}	ges.				
Seven and under, .		•			•		2,672
Between seven and twelven	ve,		•				13,188
Twelve and above, .							8,989

These figures do not include the attendance on Sundays and Holy days for Catechetical instruction and Scripture history reading. All these schools are visited annually by specially competent inspectors, known as Brothers Examiners. They draw up carefully prepared reports, which are laid before the Brother Superior General and the Brothers forming the Education Committee. A glance over these "reports" shows with what care and attention the examinations are carried on, and they can be placed on a footing with the more elaborate and verbose compilations known as the National School Inspectors' Reports.

Besides the regular "schools," it should be stated that six of the male "industrial schools" in Ireland are under the management of the Christian Brothers, viz., Artane (world-known) Kilmore, Tralee, Limerick, Galway and Letterfrack. At Cabra (County Dublin), the Brothers are in charge of the male deaf mutes, numbering about two hundred and fifty; and at Glasnevin (close to the historic cemetery), St. Vincent de Paul's Male Orphanage, in which are about one hundred and fifty orphans of the poorer classes; and a similar institution at Clontarf for the orphans of the middle classes, known as the O'Brien Institution.

With what pride must these good men, who consecrate their lives to the education and training of the poor deaf mutes and homeless orphans, view the grand results of their labors. A visit to these noble institutions at Cabra and Glasnevin shows every one that these poor afflicted children have the best of guardians and the kindest of instructors.

The space at my disposal is far too limited to give anything like an adequate idea of the usefulness and benefits of the Artane industrial schools to the poor waifs and strays rescued from the streets, lanes and alleys of the city. The Government Inspector, in one of his reports, said: "I know not that any schools under the Industrial Schools Act, in England or Ireland, has produced better results than the Artane schools have done since their establishment in July, 1870. I attribute much of its success to the able and judicious management of the staff."

A good primary education is given to all the boys in this splendid institution. The industrial training is very carefully attended to, and the work turned out is of a superior character. The great object of the Brothers in charge is to make the boys skilled workmen,—honest, sober and industrious. None but artisans who are skilled workmen and of good character are employed as teachers. In addition to a couple of hundred boys at trades, several hundred are engaged as farm hands, builders' laborers, etc.; also at hosiery, shirtmaking, tailoring, shoemaking, harness-work, etc. In short, it is a veritable bee-hive of nearly all the handicrafts.

It is noticeable that the Christian Brothers' schools in the diocese

of Dublin are very well attended considering that it is here the so-called "National" schools are strongest. In the Marlborough Street (Dublin) National (mixed) schools 1010 Catholic children were on the rolls in 1889. The average daily attendance in all the National (mixed) schools throughout Ireland in 1880 was 507,865. As we have shown above, the average in the Christian Brothers' schools is 33,000. The Brothers have 12 houses, with 52 day schools attached (not including the special "Institutions" already mentioned) in the diocese of Dublin, and upwards of 7000 pupils are in daily attendance. In Waterford diocese the Brothers are also very strong; they have 10 houses with 37 schools attached. and 3400 pupils on their daily rolls. (What a grand harvest of the still fructifying grain of mustard seed sown here ninety years ago!) In the city of Cork the Brothers have four establishments with 25 schools attached, and about 2350 pupils on the daily rolls. The Christian Brothers are established in Cork since 1811. Their monastery (Our Lady's Mount), is beautifully situated overlooking the "glorious waters of the river Lee." It was in this monastery the gifted Gerald Griffin died on the 12th of June, 1840, after being one year and nine months in the order. In addition to the day schools in this city the Brothers have a very fine college in which 250 advanced students are prepared for the Royal University and Intermediate Examinations; the Brothers are assisted in this college by a few university "grinders." Eighty years ago the only primary schools in Cork were a few poor "hedge" schools, and these only capable of accommodating one in fifty of the poor Catholic population. What a grand transformation now! How much Cork owes to the Christian Brothers! Silent, nameless benefactors, who have labored for their fellow-men; and when they rest in peace in the little cemetery in the monastery grounds, no more is known of their individuality than is suggested by the simple designation on the unornamented cross that is placed over their remains.

"The most perfect schools I have ever been in, in my life," said the late Dominican, Father Tom Burke, "were the Christian Brothers' schools in Richmond Street, Dublin, and their schools in Cork." And certainly their schools in Richmond Street, Dublin, are perfection itself. They can rank with the best of the high class schools in the city, Catholic or Protestant.

These fine schools are universally known as the "O'Connell Schools," from the fact that the foundation-stone was laid by that illustrious Irishman, Daniel O'Connell, in 1828, the year previous to his gaining that grand measure of Catholic emancipation which secured for him the godly title of "Liberator."

The Brothers' schools and oratory in North Richmond Street,

Dublin, form a fine pile. It was here, by the way, that Gerald Griffin, leaving fame and fortune outside, entered as a novice in 1838. There are seven large well appointed school rooms, capable of accommodating eight hundred boys. Besides an advanced class in which intending competitors for the Intermediate, Royal University or Civil Service Examinations are specially prepared, there is a very fine drawing and singing class, out of which many of the best draughtsmen and vocalists have gone forth.

The Catholics of Dublin feel an honest pride in having in their midst such a noble and valuable institution. Pupils of these schools, and for that matter all their schools—have risen by force of character to many of the leading professions, to many prominent positions in the public service, and in commercial life, not only in their own towns or cities, but in England, America, and the Colonies; and all, of whatever grade, are capable men, good citizens, faithful Catholics, and thorough Irishmen; and proud of being once pupils of the Christian Brothers.

The peculiar feature of these good Brothers is the fostering, paternal care with which the future of their pupils is provided for. If a boy displays ability for business, that ability is developed, and they obtain for him a fitting occupation when he leaves school. The poorer and the more friendless the boy is, the surer this provision will be: and many men who have attained to competence and respect among their fellows, are proud to own that from the Christian Brothers they received their start in life.

It has often been remarked that talent seems to be the birthright of Irishmen; and those who sneer at so-called Irish ignorance, and those who feel ashamed of their Irish parentage, would do well to look around and they will see that Irishmen, and the sons of Irishmen are in the front rank in every walk in life the known world over, and it is no exaggeration to say that many of them received their rudimentary education in the schools of the Christian Brothers at home in Ireland.

At one time the Brothers' schools had some connection with the so-called "National" Education Board, but they severed all connection, notwithstanding its worldly advantages, as soon as they found that such a link interfered with the full performance of their duty as religious teachers. The words of one of the late superiors will briefly explain what to some still appears an unnecessary and uncalled for severance from a system of education which can boast of several advantages. He said: "By the rules of this Board, we (the Brothers) were not permitted to teach in a Catholic spirit. We did not feel ourselves at liberty to avail ourselves of the reading lessons to communicate religious knowledge when a suitable opportunity presented itself; and, moreover, all refer-

ence to religious subjects was to be excluded for a certain number of hours each day. Now, having given the system (National Board) the fullest trial, and taking into account the pecuniary advantages of our connection with the Board, with the religious restrictions which that connection imposed, we came to the conclusion that to continue the connection would be inconsistent with the original aim of our Society, viz., to give a sound Catholic education to our pupils."

Every Catholic knows that without religion education proves rather a curse than a blessing, because without it, there would be no knowledge of God, and without that knowledge there can be no salvation. Nowhere is true Catholic education more certain to be found, and nowhere is it more zealously and accurately imparted than in the schools of the Irish Christian Brothers. These are the schools which are banned by the regulations of the Commissioners of "National" (?) Education! And why? Because the Brothers refuse to take down the Crucifix that hangs on the wall in every one of their schools. These Commissioners will not allow any religious emblem to be exposed in any school under their control, and will not allow a cent of the one million pounds annually granted by Parliament for the education of the poor children of the country, to any school in which religious instruction monopolizes much time. No! the Brothers' schools are Christian schools, and they are neither afraid nor ashamed to proclaim and teach Catholicity, even though they would otherwise at once receive government grants and be put on a footing with their Protestant neighbors. The anomaly of this system is the more peculiar when we come to consider that such intolerance does not exist in Protestant England.

In the Christian Brothers' schools true religion is made the basis of education. Their pupils receive excellent instruction in every branch of Catholic doctrine; they are taught to begin and terminate their work by prayer, and as often as the clock strikes every boy turns towards the image of the Blessed Virgin, or St. Patrick, in reverent attitude, and recites a short prayer: this is what we daily see in any of the Christian schools. Turn into the "Model" or "National" school, here the teachers are of every creed; many of them have taken up the office of instructor as a last resource of poverty, or as a means of temporary employment, until an opportunity is presented of embarking in some more lucrative occupation. Such men have no love for their calling; they go through their duties as through a hated task; their minds are sordid and contracted, and they cannot feel the importance of the trust committed to them. Hence it is that out of the many poor children who attend these "Model" schools so few are much improved.

and so many are hardly improved at all. It only needs to open the books used in the model schools of the national system to prove my words; they are bereft of every sentiment which would inform the Irish Catholic either as to his faith or fatherland. Open the books of the Christian Brothers, and they exhale the odor of sanctity, and instill that knowledge of their brave and persecuted forefathers, which builds up in the young heart the patriot as well as the Catholic. In a word, sentiments of the purest Catholicity, of love of country and of justice, are the elements composing the education given by the Christian Brothers, the authorized agents of the Catholic Church in the matter of education, and from which they derive their mission. As I said before, the Brothers make religious instruction the groundwork of their system, and to our mind this is more necessary in our own day than it ever has been; in proportion to the world's growth, and man's so-called civilization is the need of faith. The tendency to make this life everything is the misfortune of our times.

It is noticeable the Brothers' schools in the west and northwest of Ireland are not as numerous, or as well attended as one would wish; however, there are many causes to account for this, and time —" whose glory it is to bring truth to light "—will, we hope, soon alter these sad conditions of affairs which keep the education of the youth of these parts so backward.

The election of the present Brother Superior General in 1880 marks an epoch in the history of the Irish Christian Brothers. Under his government a new and vigorous life appears to have been infused into the work of the Institute. Evidence of this is to be seen in their revised and improved school class-books, all of which show literary merit of a high order. As a proof of the excellence and high standard of these class-books, it may be mentioned that they are adopted in many colleges and elementary schools unconnected with the Institute.

Further evidence of the onward march of the Brothers as teachers is to be found in the success of pupils from their schools who entered for the yearly examinations known as the "Intermediate Education Examinations." Year after year their pupils have carried off in marvellously large numbers, the honors and distinctions awarded in open competition by the Board of Intermediate Education. The following figures will show how well they have competed in these examinations, compared with the pupils of all the leading secular colleges and schools in Ireland, who find it difficult work, not only to pass in the subjects prescribed—which by the way would be considered "hard" in many of the leading universities—but to keep pace with the Christian Brothers' boys in their rapid yearly successes. It must be borne in mind that

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the pupils of the Christian schools who present themselves at these examinations form a very small minority of the total number—about one for every ten from all the other educational establishments which send in pupils.

In 1879 (the first year of these examinations), one pupil of the Christian schools won a "prize," and three hundred and twenty-six pupils of other schools and colleges gained "prizes;" in this year also, ninety-six pupils of the Christian schools, and one thousand seven hundred and fifty-four pupils of the other schools, gained "passes." From a published return I find that since this very uneven start the pupils of the Christian schools up to 1887 carried off 46 "Medals" for the 297 of their ten time stronger opponents; 248 "Money Prizes" for their 1441; 621 "Book Prizes" against their 3370; and 6621 "Passes" to their 18,220. These figures speak more eloquently than my pen can essay; particularly the summary of "passes" which represent the junior boys more than the others. In 1870 the Brothers' boys were beaten under this head (by all the other schools united) by a majority of over eighteen to one; and at the end of the first eight years the pupils of the Christian schools have reduced it to nearly two to one as shown above.

The connection with this "Intermediate" system has necessarily imposed additional labors on the Brothers and taking into account the constant strain necessary to insure continued success, the scanty remuneration of result fees can in no way compensate for such arduous work. In some of their schools the emoluments derived from this source are little more than sufficient to cover the expense incurred. But on the other hand, their larger schools bear evidence of the good use made of these teachers fees; here are to be seen every modern educational appliance necessary for the efficient teaching of science, etc. But if additional labor and scant remuneration constitute their share of the Intermediate Education Results, it is not so with their pupils. It has been for themthanks to their teachers—a decided and substantial success. The value of all the prizes obtained by the pupils of the Brothers' schools up to last year, amount approximately to sixty thousand dollars. But the educational advantages are still more valuable than the pecuniary. The pupils are stirred up to a spirit of selfexertion and self-reliance; and they give their teachers more willing co-operation than heretofore. In the hands of the Christian Brothers the "Intermediate" system will, I am sure, become an excellent aid to mental and moral culture; for a regular and systematic course of studies vigorously pursued for three, four or five years consecutively, based on and permeated with sound religious principles, cannot fail to produce grand results.

It is pleasing to record that the Christian Brothers do all in their power to foster and preserve the study of the Irish language, "the grand old mother tongue," the language in which St. Patrick preached the Gospel to our pagan ancestors; the language in which Ireland's martyred saints made profession of their faith in the dark days of persecution.

Evidence of their zeal to promote the study of Irish is to be found in the published "Reports" of the Society for the preservation of the Irish language, and the "Results" of the Intermediate Educational Examinations. The Christian Brothers were the first to take up the "subject" when introduced into the programmes of these examinations; and it is gratifying to record the steady increase in the number of pupils from these schools who yearly passed with honors in Celtic language and literature. Suffice to say, that at a recent examination out of 210 pupils who passed from all the schools, 156 were from the Christian Brothers' schools.

While the Christian Brothers at home in Ireland are achieving these grand results by their noble and disinterested labors, it is more than gratifying to be able to record, even though in a very brief manner, owing to the limited space at my disposal, the herculean service they are rendering to the cause of Catholic education in the different colonies which have the great good fortune to have them as teachers.

Fifty years ago exactly, three of the Brothers left the "old land" to found schools of their order in Australia at the earnest solicitations of the Bishops and priests who were beginning to fear the evil results of the godless system of education imparted by the State schools—a system similar in many respects to that of the National Board System in Ireland. No aid of any kind was given by the State towards the erection of purely Catholic Schools, nor towards their maintenance, no matter how efficient they might be. The multiplication of these State schools throughout the colony left the Catholics no alternative but to erect and maintain schools of their own in which the Faith of their children would be safe.

In nothing do the Catholics of Australia show more remarkably their attachment to the Faith, than in the sacrifices they make to provide for their children a sound Catholic education. Hence, their most ardent wish to procure the Irish Christian Brothers, whose name and fame as teachers in Catholic Ireland had reached their sunny shores.

In the Australian colonies the Irish Christian Brothers are fully maintaining the high reputation they have gained as a teaching order in Ireland. The Catholic community in these colonies—who form nearly one-fourth of the entire population, and are mostly

Irish,—may rightly be proud of this, for they share in the honor of it.

The Brothers have now fourteen establishments with forty schools attached, scattered throughout Melbourne, Sydney, Brisbane, Ballarat, Adelaide, and Dunedin, New Zealand. Their new college at Brisbane, opened in 1890, is a very fine structure costing over \$60,000.

The course of instruction in these schools is not confined to primary education alone. Many of them—notably the Victoria Parade Schools, Melbourne and their colleges in Adelaide and Brisbane have entered into competition with the Universities and Government Grammar Schools. Here too, as in Ireland, the contest is an unequal one; still the Christian Brothers' schools are gaining ground year by year, thanks to the untiring zeal and devotedness of the good Brothers. To convey some idea of the success their pupils have achieved. I may mention that at a recent matriculation examination at Melbourne University, of the candidates who presented themselves from the Christian Brothers' schools, 87.5 per cent. passed in Greek, 90 per cent. in French, and 100 per cent. each in Algebra, Euclid, History, and Arithmetic; and in four out of six subjects their pupils achieved the highest successes. And if further proof were needed of the marked success of the pupils of the Christian Brothers' schools at these University Examinations, we need only quote the words of the learned Chancellor of the Melbourne University,—" that he had some experience in educational matters, and he could state that the lads from the Christian Brothers' schools in going up to the University were well prepared in their several subjects, and showed special signs of being free from 'cram.'"

In the tropical climate of Calcutta, as well as in the more arctic region of Newfoundland, the Irish Christian Brothers have established themselves as teachers. Here, as well as wherever they are located, they have endeared themselves to all as Christian educators, who spare no efforts, stop at no labor, shrink from no sacrifice which is necessary to enable them to carry on with success a work in which the glory of God and the good of mankind are so largely involved. The Brothers have four establishments in Calcutta, although it is only two years since a few Brothers left Ireland for that distant mission. At Bow Bazar they have three fine schools with about 400 pupils attending, and also a large orphanage for 200 boys. The grain of mustard seed has certainly taken root in good soil here, and it needs no prophet to predict as good a harvest from it as is reaped in the "green isle" and under the "southern cross."

Early in 1876 the Brothers opened a branch of their institute in

that bleak city, St. John's, Newfoundland. The condition of Catholic education in Newfoundland at that time was deplorable. Previous to the arrival of the Irish Christian Brothers in St. John's there was not (excepting St. Bonaventure's College) a single male Catholic school worthy of the name, although it contained a Catholic population of nearly twenty thousand.

The Brothers began their arduous work in an old wooden building on the summit of a steep hill, and on opening day, I learn, it was crowded to its utmost capacity by hundreds of intelligent boys. The privation and hardship the Brothers went through for nearly five years can hardly be realized by those who never lived in or passed the winter in this city amongst icebergs. steep hill had to be climbed every morning before nine o'clock often in the teeth of a blinding snowstorm, and sheets of ice for a foothold. But thanks to the warm hearted Catholics of Newfoundland, all this is changed. The Brothers' new school, known as St. Patrick's Hall, is a magnificent pile, erected at a cost of over \$55,000. Here are four very spacious school rooms, with accommodation for over one hundred children in each. Early in 1889 the Brothers took over the charge of the fine college of St. Bonaventure, which till then had been in the hands of the local clergy who were unable to give it that unremitting attention which trained teachers, like the Brothers, could bestow. Christian Brothers have also been established in Gibraltar for many years. Here they have four houses with ten schools attached. Many of the Brothers here are excellent Spanish scholars, and have done splendid work as secular as well as religious educators.

The slight sketch which I have here attempted of the Irish Christian Brothers and their schools will, I hope, help to make the good work they daily accomplish in many lands better appreciated by Catholic parents, some of whom, instead of supporting these truly Christian schools, prefer to send their children to schools, which, if not wholly Godless, are sufficient to sow the seeds of indifferentism. To see an establishment of the Christian Brothers in every city and town should be the aim of every Christian citizen. Wherever they exist they become the dispensers of sound knowledge. No charity can be more judiciously exercised than that which tends to uphold these schools. Every Irishman ought to be proud of them, and every Catholic should cherish and revere them.

R. M. S.

A RETROSPECT.

PART III. AND CONCLUSION.

THE second part of our retrospect ended with a short account of the response made by English Catholics at the beginning of 1860 to that attack on the Pontifical dominions in 1859, which resulted in a loss of the greater part of the Papal States.

The present concluding part of our retrospect will refer to the period which has elapsed from 1860 to the enthronization of the third Archbishop of Westminster in the present year.

At the commencement of this period the influence of Cardinal Wiseman—who was becoming more and more of an invalid—was on the wane, and the condition of Catholicity in England and its influence on the non-Catholic world, from that time till quite recently in England, has mainly depended upon three men about whose names may be grouped all that is really important to note. These three are: Cardinal Newman, Dr. Ward and Cardinal Manning. With respect to them, however, beyond matters of public notoriety, we shall mainly confine ourselves to the relation of certain facts of personal knowledge or experience, for such facts, though apparently very insignificant, often turn out not to be devoid of value.

These three men differed very widely in temperament and, as we have found, in the effects they produced on those with whom they came in close contact.

They agreed in being objects of more or less esteem or affection or veneration, but their diversity was, to us, far more striking than their agreement.

Cardinal Manning, as Archdeacon of Chichester, was highly esteemed and exerted a wide influence which delayed the reception of many into the Catholic Church till he made his own submission in 1851. He was a typical High Church divine, saturated with the spirit of Anglicanism, save that he had affinities for Radicalism. Extremely energetic and self-reliant, he had a marvellous facility of expression, being able with a hardly perceptible pause to search for and seize upon the precise expression most suitable for his purpose. To the charm of his refined and intellectual physiognomy and ascetic frame, he added that of a thorough acquaintance with what was best in English life and with the tone of good society. That widely-experienced man of the world, the editor of the "Nineteenth Century," declared a short time ago, at the Reform

Club, that "Dr. Manning had become the greatest social success out."

A son of the Oxford of his own day, he had no knowledge of natural science, or sympathy with it. Once when the evidences of man's antiquity were presented to him strongly, he replied: "Ah! I have a short answer to all that, Non credo."

Ordained a priest (being a widower) very quickly after his conversion, he was at first a great friend of the Jesuits, who allowed him to have a confessional in their church. His knowledge of philosophy and theology were almost taken for granted, but he was never proficient in either, though theoretically a devout follower of St. Thomas. As a confessor he was certainly at least somewhat of a rigorist. In theology we believe he threw himself, in will and intention, into the Roman School, but his conversation in private showed that, Catholic doctrine apart, he retained his Anglican sympathies which augmented as the energy of life receded.

Eminently what the French call autoritaire, he was, while his sympathies in belief were unconsciously English, continental in his proclivities as regards will and action. What we recollect of his words impressed us with the notion that he cared little for the opinion of others, but greatly for his own predominance, being honestly convinced that such was for the good of religion. He was far from welcoming assistance of an independent nature, and only accepted aid of a quite subservient kind and whereof he had the entire direction.

Cardinal Newman, not less striking, though so very different in appearance from Cardinal Manning, had a physical charm altogether his own, one of the greatest a human being can possess—a marvellous sweetness of voice.

Though his influence over the minds of Englishmen was greatly checked by his conversion, he ultimately obtained far more than he ever possessed in earlier days, while he ever remained tenderly beloved by those who knew him intimately. He was a poet, and exceedingly fond of music. But a dry, caustic humor was his also. When invited by the Protestant controversionalist, well known as "Tribulation Cumming," to dispute with him before the public at Birmingham, he replied to the effect that he had small ability in controversy and could not venture to meet so redoubted an opponent in that field, but, he added, "My friends are kind enough to say that I have some skill on the violin, and if agreeable, I shall be happy to enter into a contest with you on that instrument."

On another occasion, dining out at a friend's, one of the guests, a noble lord who wished to draw him out with respect to the up-

shot of political contests in the Roman States, said: "Things are sadly disturbed just now in Italy, Dr. Newman." Staring into the distance in an apparently vacant manner, he replied: "Yes, and in China." No one present dared to say a word more on that subject.

If Dr. Manning had a marvellous power of speech, Dr. Newman, as all our readers doubtless know, was one of the most perfect writers of English who ever existed. His attachment to his friends was most hearty, and his feeling about their fidelity was most keen. In our eyes, if he seemed to possess a fault, it was an oversensitiveness about attachment felt for him and about the opinion of men concerning him, which seemed to us sometimes almost in sentiment to partake of what French divines censure under the term respect humain.

Although he had left Oxford long before physical science had taken the position there it now holds, he had sympathy with and a strong taste for natural history, so that, considering the nature of his education, he had a singularly "open mind" for scientific novelties. His "Grammar of Assent" proves how incompletely he had assimilated traditional Catholic metaphysics. Nevertheless in theology he appeared to us to retain no Anglican sympathies, but to have become distinctively Roman—as is indicated by the congregation he elected to join and introduce into England.

Nevertheless while in this respect thoroughly Italian, he remained entirely English in his inclinations towards freedom of action. He welcomed assistance in the great cause he had at heart, of a very independent kind, without seeking to regulate its details, and however he may have sometimes experienced mortification, his words and actions often indicated a singular humility.

Great was the contrast which existed in appearance, in face and figure, as well as in mental characteristics, between the two Cardinals and Dr. Ward.

If Dr. Manning represented will, and Dr. Newman intellect, Dr. Ward might well personify emotion.

Not that his will was not undeviating in whatever he thought his duty, or that his intellect was inferior in its acuteness to that of either of the others; but none the less, emotion appeared to us to be his dominating and most distinctive characteristic.

His was a very engaging personality. We were sincerely attached to him to the end, having known him as a boy, and shall ever cherish his memory. Kindness and quick intelligence beamed from his pleasant good-looking face, and no sign of asceticism was manifest in his portly figure. Indeed asceticism, much as he reverenced it, was impossible for him. Both physically and mentally he seems to have absolutely needed indulgence,

and he was devoted to the theatre and the opera. Once he said to me: "Don't you think if there was no God, the only thing to do would be to hear all the operas and then blow your brains out?" This is not, of course, to be taken too seriously. Naturally "intense," (to use a modern "argot,") he was always running into exaggeration in his expressions, often seeming to delight in paradox and employing all the resources of his brilliant intellect to support the extreme views he would often put forward-sometimes quite playfully. He enjoyed startling and slightly shocking his friends. When a lady, an intimate friend of ours, whom he had taken down to dinner, was expressing her happiness at having Mass in her private oratory, he exclaimed: "Oh, yes; delightful, of course, but you can't satisfy Sunday's obligation there." Then he replied to objections thus: "It is very nice for you to have Mass, but as to satisfying the obligation, you might just as well sing a comic song." Nevertheless, he was in fact extremely reverent as well as scrupulously conscientious and pious.

He had no knowledge or any taste for natural science; nor, we found, could he tell a conifer from an ordinary deciduous tree. He had a fine voice and gave and received pleasure in singing operatic and other music. He delighted in intellectual society, and was himself the best of company; but "society," in the vulgar sense of the word, was abhorrent to him, and when (in the days of his wealth) there were balls and other grand doings of that kind at his house, he would retire for a time to a small cottage in the vicinity reserved for that purpose.

He was devoted to philosophy, partly for its own sake, but far more for the sake of religion, to the defence and support of which all his philosophical writings were dedicated. One of the most valuable of his contributions to mental science was, in our opinion, his irrefragable defence of the validity of memory, and his demonstration of the consequences which follow the acceptance of that validity. But he was not only a very keen critic of the philosophy of other "defenders of the faith," but sometimes seemed, in conversation, to show a certain latent mistrust of the soundness of some of his own contentions and a strong negative tendency of mind. A Catholic bishop once said to us: "Ward's philosophy consists of a bundle of doubts tied together by the fear of hell."

That he had a strong fear of death and a dread of what might follow it, we know, and we had a striking evidence of the negative tendency of his mind. When sitting with him one evening at his house, after a silence of some duration, he suddenly exclaimed as he vigorously poked the fire: "M., don't you sometimes feel you

¹ In this he was in fact mistaken.

must be an Atheist?" To this we replied that the Theistic argument was for us so absolutely unanswerable that we could not be an Atheist, however much we might wish to be one. This negative tendency of his was, we think, largely due to his emotional nature and his vivid feelings about the evils inherent in human life.

We were often struck by his edifying personal humility. He knew his mental gifts, as he knew that he had two legs and two eyes, and when it was needful, would speak of them with admirable simplicity and without a trace of vanity.

Such are the impressions which have been made on our mind by our experience of the three men who have most influenced Catholic thought and action in England since 1860.

Three years earlier, Dr. Manning had established at Bayswater, his congregation of Oblates of St. Charles, and he became Provost of the Chapter of Westminster while the Most Rev. Dr. Errington (whom we had known at Oscott) was the Coadjutor of Cardinal Wiseman with the right of succession.

The year 1859, which saw the attack on the political rights of the Holy See, also saw the commencement of that great assault which has been made on its spiritual dominion in the name of evolution. For then appeared Darwin's "Origin of Species" which later elicited a pastoral letter from the Cardinal in its condemnation.

In the March of the following year there appeared a criticism of Darwin by the able pen of the late Mr. Richard Simpson. It was a memorable paper; for its author at once laid down some of the principal arguments against natural selection, while clearly showing the harmlessness to Christianity, of all that could be proved to be even probable. This criticism appeared in a periodical called "The Rambler," which contained many valuable contributions.

As we have said, Cardinal Wiseman was becoming more and more of an invalid; and we well recollect a long conference with him on Darwinism, at his country house in Essex.

Meantime the Provost, Dr. Manning, was becoming continually more prominent and influential, both at Rome and in England. Gradually the English laity (without being divided into two parties) were tending to split into two sets—one embodying the ethics of the Pontificate of Pius IX., while the others may be said to have anticipated that of Leo XIII.'s rule. The latter or moderate party was represented by the "Rambler," and was crushed by that represented by the "Dublin Review," which was the organ of Dr. Ward and the school of the extremists.

¹ For March, 1860, p. 361.

The "Rambler" came to an end in the year 1862. It was immediately succeeded by a very high-class periodical called the "Home and Foreign Review," but after a brilliant existence of only two years it succumbed to the same influences.

A last attempt was made by the same set of able writers whose chief had purchased the "North British Review." This not avowedly Catholic magazine began to appear in June, 1867, but to the regret of all cultivated minds was only carried on till the eve of the Vatican Council.

But a very important event for the Catholic Church in England took place in 1864. Most happily for us, Dr. Kingsley, an impulsive, somewhat thoughtless, highly popular Anglican divine, of the "broad school," attacked Dr. Newman, accusing him of dishonesty in controversy and an untruthful spirit. The illustrious convert having replied, Kingsley rejoined by publishing an abominable calumnious pamphlet entitled "What Then Does Dr. Newman Mean?" Then came our champion's opportunity, and nobly did he use it. He brought out in 1864 his ever memorable Apologia Pro Vita Sua. Its effect was marvellous.

Till that time a cloud of prejudice and misunderstanding had more or less clouded and obscured the future Cardinal from the clear and accurate mental vision of his compatriots. His noble work dissipated these clouds, and Dr. Newman at once attained an enormous popularity amongst non-Catholics, which he never again lost. They had long been really proud of him, though his position forbade them to show it. But now the injustice with which he had been treated, his complete self-justification, but, above all, his touching and manifestly candid narration of his past life, revealing as it did his real sympathy with his separated brethren, gained their hearts for good—a gain for him, a yet greater gain for his co-religionists, who have occupied a higher position in England ever since that memorable day. But as Dr. Newman thus rose into more favor than he had ever before enjoyed, another great ecclesiastic was rapidly approaching the term of his career.

On the 15th of February, 1865, Cardinal Wiseman died, and very solemn funeral rites, at which we had the melaucholy satisfaction of assisting, took place at the church of Moorfields. We have been told and believe that a sermon for that occasion had been prepared by Dr. Newman, but it was the Provost of the

¹ Though unwilling to interrupt our distinguished contributor in his very interesting reminiscences of events, with many of which we cannot claim an intimate acquaintance, nevertheless we deem it our duty to draw our readers' attention to the fact that the "high-class periodical" in question was solemnly condemned by the hierarchy of England and its principles vigorously repudiated by Dr. Newman. See Letters of Archbishop Ullathorne, pp. 121 et seq.—EDITOR.

Chapter who occupied the pulpit, to the grave disappointment of many who had hoped to hear memorable words from the great leader of the Oxford School of former days.

Before the death of the Cardinal, a strong desire for higher education for Catholic youth led to certain very important action on a part of very influential members of the laity supported by others less distinguished.

Up to the time of the Cardinal's death English Catholics were free, as far as ecclesiastical authority was concerned, to send their sons to Oxford or Cambridge. At Oxford, however, there was, till 1854, a matriculation test which excluded Catholics, and though nothing of the kind existed at Cambridge the attitude of the authorities towards such Catholics as had presented themselves had from the influence of tradition, been uncongenial.

Obviously, however, if a distinct Catholic college had been established in either university, its students would not be exposed to such unpleasantness. The transformation which English society had undergone, both in the Church and beyond her pale, during the years since Catholic emancipation, had made the practise of university education an obvious and urgent necessity.

Meanwhile, the English bishops, though fully aware that Catholics were studying at Oxford and Cambridge, had not forbidden them so to do. In August, 1864, Dr. Ullathorne, Bishop of Birmingham, offered the mission at Oxford to Dr. Newman. The offer was accepted, and Dr. Newman spent over £8000 to buy ground for the purpose, when the design was suddenly traversed by a report of an application on the university question to the Propaganda, who took the question out of the hands of the episcopate.

A paper of questions was then circulated, and it became known that the foundation of a college at Oxford under Dr. Newman was viewed with strong disfavor by Dr. Manning, who possessed great influence with the Propaganda, and his name was used as a warrant for the belief (*Mirabile dictu*) that the laity were opposed to the continuance of the existing liberty.

Thereupon a memorial was addressed to the Propaganda, signed by one hundred and eighty-eight influential Catholic laymen, in favor of the existing liberty and of the policy which the English Episcopate had hitherto followed, and Mr. Frederick Wetherell went to Rome with a further explanatory statement.

He visited Cardinal Barnabo, Prefect of Propaganda, on March 10, 1865, and a report of his interview (which was printed for private circulation amongst the Memorialists) contains the following passages: "The Cardinal was very courteous, but objected that the memorial had not the signature of a single prince

or duke." And we were proceeding to explain that there were no princes in England except of the blood royal, and that the only Catholic duke was a minor, when he stopped us by saying that he was perfectly acquainted with the organization of English society into peers, baronets and gentlemen, the last being the lowest rank (il grado piu basso), and that the signers of the memorial were chiefly of that rank. We tried to explain the position of English gentlemen without titles, but he did not appear to accept what we said, though he did not dispute it. So the attempt to found a Catholic college at Oxford ended to the profound disappointment and great mortification of Dr. Newman.

Among the most vigorous opponents of that project were Dr. Manning and Dr. Ward.

Now came the important question, who was to succeed Cardinal Wiseman on the archiepiscopal throne? Readers might suppose that it would be Archbishop Errington, who had been coadjutor with the right of succession. But sometime before his death the Cardinal succeeded in the extraordinary project of obtaining from Rome the deprivation of his coadjutor of this right, and thus a free course was opened for competition.

It is an open secret that the canons, who felt strong sympathy with the deprived archbishop, presented his name as dignissimus to the Holy See. It is said (and human nature makes it probable) that Pius IX. was thereby offended; but however that may be, Dr. Manning was appointed, and so became officially, what he had for sometime been practically, the ruling head of the Catholic Church in England.

The next important question, the agitation concerning which we witnessed, was that of Papal infallibility and the movements which preceded the opening of the Council of the Vatican during the earlier period of which we were resident at Rome. A controversy about it which had begun before the elevation of Archbishop Manning, became very quickly much intensified.

As we were one of those who never felt any difficulty about the dogma of infallibility but regarded its definition as the natural outcome and logical culmination of the evolution of the ages, we can the more fearlessly state our experience as to the antecedents of the decree concerning it.

Everybody knows that the Pope, as a private doctor, was in favor of

¹ It may be well to explain to American readers that as men raised to the peerage become known by their titles and not by their family names, there are very many Englishmen of ancient lineage who would never consent to obscure their family descent by a mushroom title, which would be for them, they feel no real elevation, but a descent. This fact recalls to mind the proud motto of the house of Rohan: "Roi ne peut. Prince ne daigne, Rohan je suis.

its definition, and everybody in England, who was then of mature age, interested in the question and in the way of obtaining information, also knows that Archbishop Manning was its zealous advocate. That he advocated the most extreme views respecting it. his well-known letter on the subject exists to show. So great was the influence brought to bear in its favor, that the President of Old Hall College, the Rev. Dr. Rymer, had to resign his rectorship because he was unwilling to bring pressure to bear on the lads that they might be got to sign a petition in favor of the dogma. In 1886 Dr. Ward published his work entitled "The Authority of Doctrinal Decisions," wherein, as was naturally to be expected, he put forth the most extreme views, views which since the decree of the Vatican was passed, have been held by no one known to us. Therein he dealt with the case of Galileo, when he was replied to by one of the most acute intellects we have ever known-a priest who was a family connection of Archbishop Manning, and the only one whom we have known to make Professor Huxley "hum and ha," while unable to answer. Of him the Professor once observed to us, "your friend is indeed a brain sharpener." Our former tutor, Mr. Le Page Renouf, also took part in the fray, publishing a pamphlet (which made a commotion at the time of publication) on the case of Pope Honorius.

On our way to Rome we made at Paris the acquaintance of M. Le Play, of "La Paix Sociale,"—that remarkable philanthropist who, that he might really know the actual condition of the laboring classes, lodged for a few weeks at a time in the cottages of the poor in almost every country intervening between Tartary and Western Canada.

At that time the railway of the Riviera was incomplete between Monaco and Savona. At the former place we had to enter a diligence and seated ourselves in a coupé with two other gentlemen, who, like ourselves, had booked places therein for Nice. They talked Spanish with each other and imperfect French with us. We found them to be Peruvians—agreeable travelling companions, who appeared not unaverse to our society, so by agreement we lodged at the same hotel at Genoa. After the table d' hôte, what was to be done? We were recommended the opera, and stalls being procurable we together saw a tiresome opera called the "Comte D'Ory."

The next day we set out in different directions—the Peruvians going to Florence and we to Turin, whence we subsequently proceeded on Nov. 13th to Milan. There a visit to the Ciniselli, a popular theatre where the play of seven acts is performed in the local patois, was very painful to us. A party of robbers captured a layman and a priest. The layman was spared but the priest was

shot—not on the stage, which would have offended conventional notions, but the supposed fatal volley was heard after his removal for execution. The painful part of the performance was the delight which the audience showed at the execution of the ecclesiastic, who was represented as guilty of nothing except of being a priest.

Let no one who reads these lines and visits Milan afterwards, omit an excursion to the Certosa of Pavia. It is a dream of beauty executed at the dawn of the Renaissance and was, in our eyes, the most beautiful thing we saw in Italy. After halting at Bologna, Pisa and Florence, we continued on to Rome, where arriving at about half-past one in the morning of Nov. 26th, we put up at the Hotel d' Angleterre in the Bocca di Leone.

The next morning we happened accidentally to enter first the Church of St. Augustine. It was a striking sight. Friars saying Mass at almost every one of the many altars, many Pontifical Zouaves praying devoutly, and some serving Mass, while a number of women were kneeling in prayer before the well-known seated Madonna, patroness of expectant mothers.

Our next visit was to St. Peter's. The Chapter Mass was proceeding, with Gregorian Chants. The subsequent office was no better done than we had often heard it at French cathedrals in spite of their poverty and the fact that the Pope was still King at Rome. Then after a visit to Dr. Manning at 82 Via del Tritone, we went to the Gesù, where his former Vicar-General, then Father Whittey, S. J., showed us the room in which St. Ignatius died, where St. Francis Xavier and St. Francis of Sales said Mass, and other interesting objects.

On Nov. 28th we went to St. Peter's to hear High Mass at which the Pope was to assist pontifically with as many bishops as had yet arrived at Rome.

At 11 o'clock the doors of the new Council Chamber (formed in the right Transept), opened and the pontifical cortège issued forth. We were particularly struck with the venerable and dignified aspect of the Oriental Bishops. There were some picturesque little pages and a number of camerieri segreti in their scarlet. But the High Mass was less grand than we expected, there being but one deacon and a subdeacon, though a bishop celebrated.

In England, before the Reformation, there were always three deacons and three subdeacons at High Mass on every "double" in Lincoln Cathedral. We had heard much of Pius IX.'s voice, but we were unprepared for the combination of power and sweet melodiousness wherewith he gave the benediction.

On December 7th, we enjoyed the hospitality of the American artist, Mr. Terry and his wife, who occupied the first floor of the

Odescalchi Palace, opposite the Church of the Santi Apostoli, which the Pope was that day to visit. Our eight windows looked down on an immense crowd, a road through which was kept by soldiers, whom we could see a long street off. In due time he came, his advance being announced by enthusiastic shouts, Vivas and the waving of handkerchiefs. After an avant courier, came the noble guard and then the Pope in his carriage drawn by six black horses. As he neared, an adjacent band struck up, the soldiers dropped on one knee, as did a large part of the crowd. When he left and returned, it was getting dark, but as he went, his course through the crowd, which had remained as dense, was a real triumphal progress. As we watched his carriage pass away in the distant gloom, a curious wave of white travelled along on either side of it. This effect was produced by the multitude of handkerchiefs which saluted him as he passed. We were truly astonished at the warmth of this reception, the more so as we had witnessed but a few days before, the cold one accorded to Victor Emanuel by the crowd of Florence.

We have since beheld no such enthusiastic reception, save that given to the Princess of Wales on her first arrival in London.

The next day took place the opening of the Vatican Council, which we attended with three friends. At ten minutes to six we were outside the doors of St. Peter's, in full evening dress, with no umbrellas and in the rain. In twenty minutes, however, we were admitted into the vestibule and after another half hour into the church, where at once we quickly made our way to the side of the High Altar, opposite the doors of the Council Chamber. Then came a wait of three hours. Near ten the procession entered the church, descending from above the vestibule singing, at long intervals, the Veni Sancte Spiritus, the Pope coming nearly last, seated on his Sedia gestatoria, between the peacock's feathers. At the further end of the Council Chamber was the Pope's throne, and opposite it a small altar at which the Cardinal Vicar said Mass as soon as all had taken their places. One most striking sight was that afforded by all the Bishops sitting with their mitres on during the Epistle, etc. The ceremony was very long: a sermon, the ceremony of "The Obedience," a Latin allocation by the Pope, the Litany of the Saints and the Te Deum. In the Litany it was sublime and touching to hear the Pope sing the three extra and special petitions, the vast concourse singing the Te rogamus Audi Nos in response.

Then the Pope retired and the bishops filed out at the Council doors, passing us closely, when we recognized various friends and acquaintances, amongst them to our surprise, our two fellow-travellers from Monaco to Genoa, and our companions at the Genoese opera. They turned out to be Peruvian bishops.

On the shortest day of the year we had the happiness of making the acquaintance of a very great man—Father Hecker. He was full of confidence as to the future of the Church of the United States, and we were greatly consoled to hear him give forth his opinion (which had long been ours) that Christianity was still in its infancy. He was naturally very angry with the man who then was still "Father Hyacinth," and who, as the event has shown, was professing a bastard liberalism for his own ends. That true liberal, Father Hecker, said to us: "The new wine has got into a bad old bottle and instead of the cork being carefully drawn to give a sample of the precious vintage of enlightened and liberal views, it will be smashed on the rock of Peter and its precious contents spilled and wasted."

But this retrospect mainly concerns England, and so we must reluctantly break off our Vatican reminiscences. Before doing so, however, we must say a few words about the Papal Zouaves, as that noble corps has an interest for Catholics of all nations. Amongst the evidence that forced itself upon us at Rome of the unpopularity—save with the very highest and lowest class—of the old order of things, was the hostility felt to these admirable volunteers. As far as we saw, they had no admission into Roman society, and we had even greater difficulty in entertaining at dinner in our hotel an officer of that body.

He was a charming young Irishman named Captain D'Arcy, then twenty-seven years of age and as estimable as he was good looking. He had been nine years a Papal Zouave and he entered as a private. A Spanish Prince was also a private and a French Duke was a sergeant. A true spirit of Christian equality and goodfellowship animated the body, and we saw plain evidence of this when we had the pleasure of dining at their mess.

From Captain D'Arcy we heard many interesting details about Mentana and events which preceded that encounter. Our informant had, naturally, the best information, and we wrote down his words at once, which we here transcribe.

He had no doubt about the bad faith of the French Emperor who meant to allow the Piedmontese to seize Rome, and intended his troops to arrive too late to do more than witness a "fait accompli." This was the cause of the great delay at Marseilles, and of the embarking, disembarking and re-embarking of the troops, which, moreover, took four days to go thence to Civita Vecchia.

There they were disembarked as slowly as possible, and when in Rome and just about to start against the Garibaldians, an order came from the Emperor that no French soldier was to go outside Rome or do more than defend the city. Happily, the French

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officer in command said "it is too late," and tore up the order. The soldiers with most of their officers were animated by a strong feeling of hostility to the brigands, while the Zouaves were furious on account of the infamous blowing up of their barracks. Their cry at this time was not as usual "Viva Pio Nono!" but "Serisstori!" the name of their barrack which had been blown up.

That explosion was part of a plan to seize Rome. It had been well arranged and all the barracks of foreign troops were also undermined and the mines charged. They were all to be blown up together, for which the signal was to be the ringing of the tocsin from the Capitol, which was to be accomplished as below mentioned. Then the Garibaldians were to rush to the Vatican and compel the Pope to abdicate or kill him; Cardinals Antonelli, Barnabo, some others and certain Papal Princes were also to be put to death.

Some palaces, convents and churches were to be given up to plunder for two days; then the Piedmontese were to enter to "restore order," when the French would recognize the "fait accompli."

The key of the Capitol was to have been obtained by bribery, and the Garibaldians thought that in this they had succeeded, as to a certain extent they had. The guardian had promised to lend it to a man who offered five hundred francs for a short loan of it, and it was arranged he should come at five o'clock to receive it. The guardian, however, told his wife, and she insisted on his speaking to an officer about it. The officer told the man to do as he had promised to do, and then posted some Swiss guards inside the Capitol. The stranger came at the time appointed and having got the key went with two others to the Capitol, which they entered unsuspectingly and were immediately bayonetted by the Swiss. Some one hundred and fifty Garibaldians, thinking all was secure, prepared to follow and then rushed to the Capitol, where they were met by a volley which killed sixteen while the rest were captured. Had the tocsin rung out, all the barracks would have been blown up. As it was, none would have been so, but that the villian appointed to blow up the Serisstori barrack, fancied that it was its distance alone which prevented his hearing the bell, and so fired the train. Fortunately only a part exploded, but that was enough to kill twenty-six poor Zouaves whose groans and cries were heard for four hours amidst the ruins. Had it not been. however, for this partial explosion it might not have been found out till too late that the other barracks were mined. The mining was done through the treachery of the native troops, who were never to be trusted.

The absence of any practical sympathy or zeal for the Pontifical

cause on the part of the country population was shown some time before during the gallant struggle of General Lamoricière against the Piedmontese troops. He never had one particle of help from the population he was in fact defending from crushing taxation, as the event has shown.

We did not remain in Rome far into the eventful year 1870, but long enough to feel certain of the proclamation of the dogma of Papal infallibility. The reception of it in England, so far as our personal experience went, took place with little difficulty, although there were not wanting some amongst the clergy who did not accept it ex animo, though they made no external manifestation, contenting themselves with a mental appeal (confidentially disclosed to intimate friends) to a re-assembling of the council at some uncertain future.

One very important manifestation of a different kind was, however, brought about by it. Gladstone, vexed and annoyed by the consistent and necessary opposition of some of his schemes on the part of the Irish Episcopate, published his intemperate attack on the Church, entitled "Vaticanism," and this attack he attempted to justify through the recently defined dogma. He then set going a recrudescence of anti-Catholic prejudice, which made some of us look back on the memorable outbreak of 1851.

Thereupon Dr. Newman once more stepped forward and addressed his fellow-countrymen in the well-known "Letter to the Duke of Norfolk," then published by him. Most Englishmen and most, we wish we could say all, Catholics felt esteem, pride and gratitude at his noble vindication therein of the rights of conscience and of the loyalty and patriotism of the Catholic body. His voice with its words of peace and wisdom disarmed prejudice, calmed passion and so stilled the storm; but it also carried to a still higher degree that national veneration for his personality which had been before called forth through the attack of Dr. Kingsley. We have to thank Dr. Newman for dispelling the last outbreak of anti-Catholic passion which has occurred in our time, and which now promises to be the last for all time.

About this period a devotion to our Lady of Lourdes began to spread widely amongst English Catholics, and many reports of miracles excited a widespread interest which we naturally shared, and which led us to pay a visit to that shrine in those earlier days of its celebrity. At this time, when fresh interest about it has been excited amongst the general public, a few notes of what we saw in 1874 may not be unwelcome to our readers.

We arrived at Lourdes in the beginning of April, and put up at the Hotel des Pyrenées; we then quickly made acquaintance with Dr. Dozous, the medical officer of the town, who told us he had been a Voltairean till convinced of his errors by the remarkable cures he had witnessed and which were to him quite inexplicable from a medical point of view. He had been, he said, especially impressed by cures of infants, as in their case it was impossible to attribute any curative effects to the action of the imagination. He told us of a man who was a complete unbeliever, but who was cured at once of a creeping ulcer on the hand by holding it a short time in the miraculous water. He also took us to see Bernadette's sister, by whom various statements I had read were confirmed. Dr. Dozous said he was himself near Bernadette when the water first began to appear in the cave.

When at Toulouse, we visited Dr. Roques, No. 8 Rue d'Aussargues, to make inquiries as to the case of young Jules Lacassange of which we had read in M. Laserre's work on Lourdes. He assured us that the case seemed to him inexplicable, but referred us to Dr. Noguès, Rue St. Anne, as the medical man who had attended the patient; he also referred us to him as a witness of a singular fact which had occurred in his own (the narrator's) family.

His daughter was, he said, like himself and his father, short-sighted. She was so short-sighted that she was unable to study the piano without spectacles. He and his wife were much disturbed at this as prejudicial to her future. Soon Madame Roques expressed an intention of taking the child to Lourdes, in the hope that thereby she might acquire a normal power of vision; they went, and in the Grotto, she became at once possessed of such ordinary power. Mother and daughter returned home at night, when, to the father's amazement, (he had been, he told us, an unbeliever) the child was able to read at a distance, previously quite impossible to her. "I was, however," said the father, "so astonished that I had little sleep that night, and early in the morning I called our daughter to our room, and then to my surprise and delight, she read for me inscriptions on distant buildings. She has remained the same ever since."

Thereupon we called on Dr. Noguès and received his confirmation of what we had been told. He informed us that he had attended Jules Lacassange and knew that he had been unable to swallow any solid food for more than a year. Jules's father who was, like Dr. Noguès himself, an unbeliever, assured him that his child was suddenly cured at Lourdes, and had been well ever since. The doctor also told us that he could offer no satisfactory explanation in either case, adding that, of course, he could never admit a miracle. Nevertheless, he was sure that Jules was not hysterical or of an excitable temperament, but was quiet, obedient and gentle.

Ever since the first abandonment of the idea of a Catholic col-

lege at Oxford, the question of the education of Catholic youth had been a very prominent one in England. The bishops were anxious to provide Catholic higher education, and the richer and more prominent laity strongly desired the advantages of university education for their sons.

By degrees, the project was formed of starting a Catholic establishment for higher education at Kensington, and we were urgently pressed to undertake the biological section of the teaching. Feeling strongly persuaded that the venture would not succeed, and knowing well that even should it be able to maintain itself, it could never offer to Catholic parents any of the advantages they desired for their sons—which were mainly social advantages, we did all we could to decline the post, but the Archbishop of Westminster, who became cardinal in March, 1875, made the most forcible claim to our obedience in the matter, and so a Catholic college—often absurdly called a Catholic "university"—by degrees took shape. A pastoral letter on the subject was put forth by the whole Catholic hierarchy, and subscriptions were earnestly sought. At the college, classical studies were under the care of our friend, the late Professor Paley, an M.A., of Cambridge, grandson of the Paley of Paley's "Evidences." Chemistry was taught by our friend, the late Professor Barff, also an M.A., of Cambridge; while physics were confided to him who is happily still our friend, Sir Phillip Magnus, a most justly esteemed member of the Jewish community. The rector of the college was Monsignor Capel.

A considerable number of the more prominent English Catholics of various classes were nominated by Cardinal Manning, to form what he called a "Senate." Among them were the Duke of Norfolk, the Marquis of Ripon, Lord Howard of Glossop, with clergy, merchants, barristers, and medical men, amongst whom was the convert. Dr. West.

The Duke of Norfolk, Premier Duke, Hereditary Earl Marshal and Knight of the Garter, stood, and stands, most fitly at the head of the English laity: the son of an exceedingly estimable and admirable father, he adds to the piety of a zealous and devout Catholic, the natural virtues of a most exemplary citizen—virtues which have been manifested by him in every relation of life.

The Marquis of Ripon, also a Knight of the Garter, was not an hereditary Catholic, but a recent convert. He also differs from the duke in being a zealous advocate of the Liberal party, while the duke is a strong Conservative. The marquis had long taken a prominent part in political life, and has some special interest for Americans, since he was an arbiter in the Alabama question. He remains both a devout Catholic and a strong political liberal, and we can bear personal testimony to his sympathy with science and his zeal for all that tends to ennoble human nature.

Of the men who formed the senate, amongst whom was our unworthy self, some found that they were required merely to furnish ways and means; not to give advice, still less to exercise any control.

When a distinguished medical member rose to offer some observations and to make a few objections on certain points of detail, Cardinal Manning, without waiting for him to finish, stood up and shaking at him an upraised forefinger, said:

"Dr. West! in the Catholic Church there is no House of Commons."

The college was formed and started, and we were commissioned to organize a teaching zoological museum, the greater part of which still exists at St. Charles's College in London. We found the rector, Monsignor Capel, most sympathetic, considerate and kind, and we are persuaded that had his views been carried out at the college "Founded by the Hierarchy" we would have had a certain success. Monsignor Capel's idea was to have the professional staff lecturing to students of various categories: some residing with him, some residing in establishments formed for that purpose by various religious orders, and some in certain authorized lodg-Thus, parents who preferred Jesuit or Benedictine ing houses. discipline could place their sons under such, while others who wished their youths to begin a modified and guarded independence, could make use of the ecclesiastically licensed lodging houses. Unfortunately the proposed hostility to religious orders by Cardinal Manning (in spite of his early friendship with the Jesuits), rendered this course impossible. It is only since his death that it has become possible, even for Benedictines, to enter the Archdiocese. A footing for them or for the Jesuits at Kensington, was an impossibility. An objection was even raised to our receiving a friendly visit from a Jesuit acquaintance in our own private room at "University College."

It had been an arrangement on which we and Professor Barff had insisted as a sine qua non, that admittance to our lectures should be granted to non-Catholics known to us, who wished to attend. But when, in the second year of our professorship, we wished to carry this arrangement out, Monsignor Capel declared that to his regret he was not allowed to. We confess that we half suspected the assertion to be not quite justified, but later we knew too well that we had been unjust, for the archbishop told us that such had been his express order.

But Cardinal Manning did the Church a great service by the esteem and acceptance he gained amongst non-Catholics. He was,

¹ So officially designated in the Catholic Directory.

indeed, rather fond of their society and, amongst others, of that of the able editor of the "Nineteenth Century," who was also secretary to the Metaphysical Club to which at this time he had the honor to belong. One of its most valued members was Dr. Ward, who was for a considerable time its president; Cardinal Manning and Father Dalgairus also belonged to it. Amongst non-Catholics were Messrs. Gladstone, Huxley, Tyndall, Clifford, Fitzjames-Stephen, Tennyson, Grant Duff, Martineau, Leslie-Stephen, Hutton, Ruskin, the Archbishop of York (Dr. Thompson), the late Bishop of Peterborough (Dr. Magee), and the present Bishop of Gloucester.

Here on one occasion the Cardinal showed conspicuously that savoir faire for which he was famous. He and the Archbishop of York were the greatest people present, and the secretary was distressed as to which of the two should take precedence in going in to dinner. By courtesy, the Cardinal should have had it; but, by the law of the land, the Archbishop of York was far above everybody else. The secretary made known his discomfort to the Cardinal, who, as the doors of the dining-room were thrown open, advanced to the Archbishop of York and taking him by the left arm (thus placing him on his right) the two walked through the doors, side by side.

At every great philanthropic gathering at the Mansion House or elsewhere, Cardinal Manning had his place on the platform; and he was to be seen at the garden parties of the Prince of Wales at Marlborough House. At the time of his consecration, none but Catholics had spoken of an "Archbishop of Westminster," but before his death, no one hesitated so to call him.

One day, when sitting with him in his house in front of the portrait of Cardinal Wiseman, we pointed to it and said, "Your predecessor was Archbishop of Westminster de jure but you have made the archbishopric an archbishopric de facto." We spoke the truth, and pleased him.

Meantime the Catholic College at Kensington, first ceased to progress, and then began to decline. Dr. Ward, who had been and was so great an opponent of a college at Oxford, was not alto gether satisfied with even our humble institution at Kensington—not at least with all of its professors. Nor, we regret to say, were one or two of the latter so loyal to their rector as they should have been.

But as we said, Dr. Ward was not contented with all the *personnel* of the college, and though we think he reciprocated our personal regard for him, he was not contented with us.

In the beginning of 1876, we published, under the title "Contemporary Evolution," a collected series of essays which had

appeared in what was then the "Contemporary Review," but which has since become the "Nineteenth Century." Therein we had attempted to show how political, scientific, and philosophic evolution must result in enormous advantage to the Church. We declared that one important effect of the great modern movement hostile to the Church, must be to let in on it, an, at first destructive, but afterwards renovating action of "Natural Selection." We said: "During the period in which the Church had full temporal support and sheltered within its fold whole nations, with hardly an avowed dissentient, the following merely natural effects must have inclined to mar its efficiency:

- 1. Want of the stimulus of opposition, tending to diminish the vigor of efforts for its support and extension.
- 2. A similarly diminished need for the diffusion of a keen, intelligent and reverent apprehension of its doctrines and teachings.
- 3. A lowered moral tone from the influence of an indifferent majority which were included within the Church.

Thus an unenergetic, tepid, unintelligently apprehensive and morally inconsistent spirit, may but too naturally tend to diffuse itself over a temporally-supported, honored, and wealthy Church without declared dissidents." . . . On the other hand, "when perfect free play is allowed, the Church must come to be more and more composed of citizens whose intellects fully accept her doctrines and whose modes of life more or less fully harmonize with her precepts and counsels; moreover, such citizens will naturally have their emotions more and more strongly excited, and their volitions rendered more and more vigorous, by those very actions which the struggle for existence renders needful in support and extension of that system to which they adhere, and which the fact of their adhesion under varying circumstances tends more and more to elicit."

We represented a churchman as expressing his views, as we thought, with respect to the Church's past history and present prospects with great moderation and dispassionately.

This passage we will venture to quote, because we received a warmly written approbation of it from Cardinal Newman.

It was as follows: "The Church as a whole has never known retrogression or defeat since she stepped forth from the upper chamber in Jerusalem, conquering and to conquer. The Church's progress is to be estimated not by the number of souls who externally profess belief in her, but by the number who obey her laws in a sufficient degree to obtain their salvation.

"When the Church, in mounting the throne with Constantine, obtained what in the eyes of the world was a startling triumph,

she made no doubt a true and proper step in advance, but one attended with many concomitant disadvantages and dangers. In condescending to allow her sacred monogram to adorn imperial standards, and in permitting kings to sanctify their diadems with the sign of the cross, gratitude was due from powers so favored to the Church which granted them, not subservience from the Mother and Queen, to the children she nourished and protected.

"The barbaric tribes, successively led under the Church's sway, were providential agents in bringing about that glorious dawn of church supremacy, the mediæval theocracy. But considerable defects attended that development. Vast numbers of the indifferent, the gross, the merely credulous and the worldly, were led within the Church's fold by circumstances, accepted its doctrines unhesitatingly, but unprofitably, since their works too often did not accompany faith, and belief without charity leads to superstition.

"The Christian mediæval system culminated in as near an approach to an universal theocracy as was then possible; but the world was manifestly quite unripe for a perfectly developed condition. It was still half undiscovered while a mass of latent paganism existed in Christendom.

"A great process of division of labor had to follow. Philosophy, politics, science, art, etc., had to become the exclusive occupation of different minds, instead of all remaining in the hands of the clergy, whose proper study is theology. Had Christians, especially those highly placed, been thoroughly imbued with the spirit of religion, no doubt the necessary transformations might have taken place peacefully and without religious disruption. But the essentially papal character of the Church was not fully recognized, nor was it then experimentally known how by separation from the centre of spiritual life, the supply of vital force is thereby necessarily cut off. The pagan principle of State supremacy, once effectually introduced, ran its logical and inevitable course fatally to the mediæval theocracy and the social system therewith connected. Providentially accompanying this movement, there has gone on a gradual perfecting of the Church's independent organism, and a greater and greater detachment of it from the State.

"The Church has willingly lent her aid to support the secular power, which in return has generally sought to bind her in golden chains or has ill-treated her, as now in Germany. This fortunate perfidy will enable the Church to escape popular enmity directed against a tyrannical State, while her organization will enable her to survive its downfall.

"The religious changes of the sixteenth century will ultimately turn out to have been really the Church's advantage. Before then, the Church contained a mass of latent heresy and infidelity, while now the religious bodies external to the Church contain a mass of latent orthodoxy.

"This is especially the case amongst English-speaking Christians. The noble anti-Erastian passion of the sturdy Puritans, and their honest zeal against what they believed to be idolatry, were essentially most Catholic, as was also the heartfelt piety of the evangelical protest against the formalism which was so general when it arose. The marvellous growth of high church views has resulted in a forest of new spires, in schools, convents and pious institutions far and wide in England, eloquently proclaiming religious progress. In the Protestant masses of to-day is contained an immense body of latent Catholicism and the number of those who have really understood the Church and rejected her, is infinitesimally small.

"Of course destructive action, however good its results, cannot be approved; to apprehend it was the error of De Lamennais. A union of Church and State is the true ideal, and will one day spontaneously appear (when the world has been converted) through common consent.

"But Christianity is forbidden to propagate itself by the sword. The children of those who have thrown off her easy yoke cannot, upon church principles, be religiously coerced; for the Church condemns the use of force when a nation has either not received or has lost the faith. We read in the Breviary office of St. Augustine of Canterbury, these words, 'Ad cælum homines trahendos esse non cogendos.'

"But the destroyers, in their own despite, performed a salutary function. A continuous action of six hundred years has not been permitted without good cause; and iniquities have been overruled for the manifestation of the Church's glory in a world full of civic freedom.

"The long process of Christian evolution having, in the Vatican council, culminated in the complete organization of Supreme authority, the liberty of the individual regains full play—the restraint of conscientious fears as to possible ill effects of his utterances being removed by the recognition of an infallible authority at hand to render well-meant but mistaken efforts harmless.

"Judging then of the future by the past, changes to come will but bring out more and more the Church's true nature by gathering in the latent Catholicity of separate bodies, and by sloughing off such unworthy members as have in the past been retained in it by sloth, ignorance, or interest. It will thus necessarily become more and more conspicuous for the holiness of its members as compared with such of the population as is avowedly pagan and

unbelieving. As the process of evolution has gone on from the inorganic world to the organic, from the vegetable to the animal, and from the simplest form of sentient life, through constantly increasing complexity, till the hour struck for the introduction of a rational animal into the world, so the evolution of humanity has proceeded, and is proceeding, from direct and simple conscious apprehensions to more and more reflex, self-conscious comprehensions. And this applies fully to the acceptance of the Catholic Church. As it has been, so it will be. Of time there is no stint. The next glacial epoch is sufficiently remote. By the continuance, then, of this evolutionary process there is to be plainly discerned in the distant future, a triumph of the Church compared with which that of Mediæval Christendom was but a transient adumbration. A triumph brought about by moral means alone-by the slow process of exhortation, example and individual conviction, after every error has been freely propagated, every denial freely made, and every rival system provided with a free field for its display. A triumph infinitely more glorious than any brought about by the sword, and fulfilling at last the old pre-Christian prophecies of the kingdom of God upon earth."

The work here quoted, at once met with a very hostile criticism by Dr. Ward in the July number of his "Dublin Review" for 1876, to which a reply of ours was published in the October number of the same "Review." Then Dr. Ward made a rejoinder in the January number for 1877, entitled "Professor Mivart on Liberty of Conscience." This rejoinder was an excellent example both of Dr. Ward's extreme views and his unfair (unintentionally, but grossly unfair) treatment of opponents. We are therein charged with sanctioning the unrestrained propaganda of free love and murder, and with a number of other offences of various degrees of enormity. We should not trouble our readers with this matter but for the fact that the letter we wrote by way of our rejoinder was not allowed to appear, the Cardinal Archbishop interfering to stop it, that we were permitted to do being to publish a brief colorless disclaimer of such monstrosities, which appears at p. 557 of the same volume of the "Dublin Review." As therefore the Catholic public has never had an opportunity of perusing our reply (which has hitherto remained unpublished) we will for the sake of justice make known the following letter which we received from Cardinal Newman, and which (with others we have the happiness to possess) has never before been published. It is expressed as follows:

THE ORATORY, April 22, 1877.

My DEAR PROFESSOR MIVART:

I have seen with great concern the way in which Dr. Ward has treated you. Controversy is his meat and drink, and he seems to consider it his mission to pick as

many holes in others as he can, and to destroy to the uttermost the adhesive qualities of Catholic brotherhood.

I have suffered from him quite as much as you. He has before now written to Rome against me—but I have never answered him, and doubt whether it is worth while for any one to do so. A Review goes on forever—and thus he is sure of having the last word.

At the same time, I can quite understand your feeling that you must put your protest on record against his perverse ingenuity.

Thank you for sending it to me. I shall preserve it in our library.

Very sincerely yours,

JOHN H. NEWMAN.

At that time a great many other English Catholics, both cleric and lay, suffered under a very trying tyranny, but the dawn of better days was at hand.

On February 20, 1878, His Holiness Leo XIII., was elected Pope, to the joy and satisfaction of the whole Church. In the very next year the sovereign pontiff created Dr. Newman a Cardinal. Deep and profound was the satisfaction of those who had long hoped and endeavored to obtain for the great man, of whom all English-speaking Catholics are proud, that well merited dignity. Opposition carried on in the dark had hitherto frustrated those hopes and endeavors, but the bright beams of the newly-risen Lumen in Cielo penetrated in all directions with the most beneficent results. The result as regards Cardinal Newman not only gave consolation to Catholics, but the whole English nation participated in their satisfaction and were proud and rejoiced at the honor thus conferred. Many of us were then disposed to sing our Nunc dimittis. And now, indeed, it is time to conclude our brief retrospect; for no disputable matters of more recent date can be fitly touched on here.

The new Cardinal was not only tenderly cherished by the devoted circle in which he dwelt, but even by those were not Cathlics. When, not long ago, a certain critic proposed to publish something which might have given him some vexation, one who has control of that first-class Anglican paper, "The Guardian," immediately objected, saying, "Do nothing of the kind, you might kill him."

When the end at last came, the concord brought about amongst all creeds and classes in England was the most wonderful manifestation of the kind of which we have ever had any experience.

He survived for some years Dr. Ward, who was the first to disappear of the three most influential Catholics to whom we referred in the beginning of this paper. The third and last soon followed his brother Cardinal, and now the Church in England progresses under new auspices.

The advent of the last successor of St. Augustine of Canter-

bury, Dr. Vaughan, to the throne of Westminster, heralds a new epoch.

The long pontificate of Archbishop Manning, which had done such great things for the education of the poor, and had been fruitful in other good works, none the less gave some expression to the unconscious prejudices of a convert from Anglicanism of mature age.

Archbishop Vaughan, who is no convert but the son of an ancient and revered English stock, has no temptation to turn his back on his ancient Catholic predecessors. We look forward then with assured hope, to the resumption of the lines followed by Cardinal Wiseman while still in the plentitude of his vigor, modified of course by the experience and the circumstances of the last forty years.

A bright sign of this happy tendency was the magnificent public reception by the Archbishop of his Pall, which we had the happiness of witnessing. A revival of ancient rites which had not been witnessed in England since the days of Cardinal Pole, more than three hundred and thirty years ago.

To all sincere English-speaking Catholics, and eminently, therefore, to those of that marvellous Church of the United States so full of promise for the future, the progress of the faith in the Old Country must be a matter of interest, and as the future depends largely on the past, we have, on this account, ventured to place on record for American readers, this brief record of the personal experiences of an English Catholic during the latter half of the present century. Laus Deo!

St. George Mivart.

1

THE ROMANCE OF THE "COUNTRY OF THE LAKES" —THE FRENCH RACE—AND THE APOSTLE OF LITERATURE IN DETROIT.

ONE of the latest of the current series of the lives of "American Statesmen," is "Lewis Cass, by Andrew C. McLaughlin, Assistant Professor of History in the University of Michigan, edited by John T. Morse."

Had the opening chapter been omitted, and the memoir commenced with the second chapter, on page 33, it would have been better for the standard of this historical series, for its reliability, and probably for the literary reputation of the biographer, connected as he is with the chair of History in the extensive institution at Ann Arbor, Michigan.

From the advent of Cass in Detroit, in 1812, and his appointment the following year as governor of the Northwest Territory, until his retirement from the cabinet of President Buchanan, just before the war of the Southern Rebellion, there is abundant material, if properly collated and edited, for several such volumes as the one under notice.

On page 4, of the opening chapter, the biographer remarks: "But the Iroquois could not be charmed by chanted vespers, nor softened by Christian influence. The priest endured tortures, and prayed without ceasing, and without avail. Had he been successful, the Indians of western New York and northern Ohio would have been won over to purposes of French statecraft."

This is an historical fiction, so stale and so shallow, and so frequently uttered, that it is unbecoming American writers to continue to give it currency.

If it be accepted as an index of the historical profundity of the biographer, it is a lamentable self-exposé of shallowness; if it be the result of prejudice, it is out of place in the history of such a true American as was General Cass, whose well known generous principles, fortified by experience, were the opposite of all that is bigoted in reference to the religion of his fellow citizens.

The story of the Iroquoian missions, 1640-1710, is the "Romance of the Country of the Lakes of New York."

The domain-proper of the "League of the Five Nations," of the Ho-de-no-sau-nee, or, as they were called by the French, "les Iroquois," extended from the Hudson to Lake Erie, and from Niagara Falls to the sources of the Genesee.

¹ Houghton, Mifflin & Co., Boston and New York, 1891, 16mo., pp. 357.

The League held jurisdiction over the regions tributary to the St. Lawrence, from the Ottawa to the shores of the Georgian Bay; over the country tributary to lakes Erie and Ontario; and exercised sovereignty over all the Indian nations between the former lake, the Ohio river and the Atlantic Ocean. The domain-proper of the Ho-de-no-sau-nee was principally in Central New York, the nations having given their names to the lakes and the river near which their cantons had originally been built four centuries ago, comprising the Onondaga, the Oneida, the Seneca, the Cayuga lakes, and the Mohawk river.

The "Country of the Lakes," as it was called in the figurative language of its occupants, was a sylvan paradise, situated between the Dutch on the Hudson and the French settlements on the St. Lawrence.

No living mortal has seen this domain in its pristine loveliness. If, at the present day, it is renowned for its romantic beauty, and admired by tourists from all quarters of civilization, what must have been its attractiveness before the axe of the white man had been heard, as it echoed within its solitudes, or the beauty of its scenery been marred by modern surroundings!

A race of warriors had, for two centuries, made the "Country of the Lakes" their home when Cartier first ascended the St. Lawrence.

Some of their chiefs, in a figurative manner, forbade his progress, but Cartier had come to stay. When the primitive settlements of the French were subsequently made on the shores of the St. Lawrence, they were ravaged and desolated continuously by the aboriginal lords of the soil.

The Iroquois became the relentless foes of the English settlers, as well as of the French. In the primitive villages of the latter, the cry, "les Iroquois," "les Iroquois," and in the former, the shout of "the Mohawks," "the Mohawks," paralyzed nearly all upon whose ears the ominous cry fell.

When the Catholic missionaries had, after great toil and the martyrdom of distinguished men, converted the people of the Huron nation, Huronia became an aboriginal Elysium. The country was invaded by the Iroquois, who claimed territorial jurisdiction, and devastated worse than were the villages of the Highlands of Scotland during the succeeding century by the German minions of the Duke of Cumberland.

The autonomy of the Huron nation was destroyed; it was, as such, literally wiped out of existence. The Hurons were kindred in race with the Iroquois, and used a similar dialect. Some escaped the general slaughter, fled to Canada and westward by way of the lakes, while others, men, women and children, were brought as

captives to the Iroquois cantons in New York, adopted into the respective tribes, and, in time, were assimilated with the indigenous people of the Iroquoian commonwealth.

The constituency of the tribes of the League, who were utterly pagan, had been decimated by continuous warfare; and their lessened numbers were not only recruited by the captive element, but the physical standard of this race of Romans was restored by the new blood from Huronia.

It was by this drastic process that the leaven of Christianity was introduced, through Christian Huron captives, into the Iroquoian cantons.

The work of the French Jesuits had been as thorough in Huronia as that of the Spanish Jesuits had been in Paraguay. In both countries a pagan people had been converted to Christianity, and semi-civilization had succeeded to barbarism.

These are historical facts. How the parody of "chanted vespers" can apply without absurdity is self-evident.

The South American "reduction" was destroyed by the political jealousy of quasi Catholics, the North American Christian fabric by a rival barbarian confederacy pur sang.

Father Isaac Jogues, who, with Father Charles Raymbaut, another Huron missionary, had planted the Cross on the soil of Michigan, at Sault de Sainte Marie, in 1640, was, with his attendant, lay-brother René Goupil, captured and brought to the Mohawk canton.

Goupil was martyred, but Jogues was reserved for more refined torture.

During his captivity, his saintly personality did not escape the watchful eyes of the sagacious sachems, who observed him closely while he ministered to the Christian Hurons, some of whom were his own neophytes. It was the first experience of the sachems, by contact, with a Catholic priest, and the impression created was profound. The Mohawk sorcerers, jealous of the aureole of the missionary, claimed him by right for torture, and his days seemed numbered; but he was enabled to escape to Albany, where the Dutch Governor, Van Curler, sent him down the Hudson to New York. Here he was kindly received by the Dutch pastor, Dominie Megopolensis, and cared for until his passage to Europe was provided by the Dutch Governor, Van Kieft. There is much that is suggestive about the kind manner in which the fugitive French Jesuit was assisted by the Dutch functionaries at Albany and New York.

Had Jogues been found on British soil, a reward of £100 would have been paid his captor, while hanging and quartering would have awaited the prisoner. Arrived at Rome, so mutilated were his hands that a dispensation had to be obtained from the Holy

See before he could canonically celebrate the august sacrifice of the Mass. He subsequently returned to his brethren in Quebec.

In the meantime the clamors of the Christian Hurons in the Mohawk cantons for a missionary to reside amongst them had been so incessant, that the sachems were moved during a brief interval of peace to send a deputation to the French governor at Quebec to solicit a resident-missionary in their nation. The governor was unwilling to risk the life of a priest in such a perilous enterprise; but he referred the delegation to the Father Superior of the Jesuits in Quebec.

The latter, in charity for the souls endangered, promised the delegation a missionary, and they departed for their homes.

This was the origin of the Iroquoian missions, purely Christian in inception, the political power having refused to sanction the project.

Before outlining briefly the first and succeeding Iroquoian missions, their glorious success and their unfortunate extinction, the subject will be more appreciatively understood by an equally brief exposé of the composition of the Ho-de-no-sau-nee Confederacy.

At the formation of the League four centuries ago, a code of tribal, national and federal laws was established, which, in the language of the Iroquoian historian, Morgan, "were the most unique ever devised for the government of any people, and which have stood the test of centuries of time." However this may be, the fact remains that the same laws, with but slight changes, constitute the rule of life and the polity of the survivors of the race wherever found at the present day.

The ruling power was vested in a class of fifty sachems; each of the five nations was divided into tribes, and to certain of these tribes in each nation was allotted a limited number of sachems who were to be hereditary in the tribe from which they were originally chosen, and who were to succeed by the female line of descent exclusively.

The sachems were to be rulers, not warriors; they were rulers in their respective nations, with judicial and legislative functions, and supreme rulers when assembled in general council over the Confederacy. The seat of government was at Onondaga, where were the council-fire and the wampum records of its laws, treaties, councils and history. The custody of the "fire" and of the records had remained for centuries in hereditary sachemships.

"The annual councils of the fifty sachems," says Governor Clinton, "which were held near the council-fire at Onondaga were conducted with great decorum, ceremony and solemn deliberation. In the characteristics of profound policy they surpassed an assembly of feudal barons."



¹ Clinton's Discourse, 1811.

"The senators of Venice," says Father Hennepin, "do not appear with a graver countenance, and perhaps do not speak with more majesty than the Iroquoian sachems when assembled in council."

"The government of the Iroquois League," says Colden, "fore-shadowed the American Republic, which succeeded centuries later." Bancroft, Schoolcraft, Morgan, and other historians may be consulted for similar testimony.

Each of the five nations had the right to manage its own affairs and to declare war on its own account; but such action did not bind the other nations nor the Confederacy, which was subject to the council of all the sachems, the enactments of which, to be valid, required unanimous consent.

War was conducted by chiefs and warriors subject to local regulations.

The Ho-de-no-sau-nee, or "Long House," had, figuratively, two doors. The "first fire" and western door, leading from the west, was confided to the Seneca nation, with hereditary sachemships as guardians. The "fifth fire," the eastern door, was confided to the Mohawks, with similar guardians; the former nation was the most numerous and had a larger territory to defend, but the Mohawks were the most warlike and were charged with the custody of the conquered and tributary nations between their castle and the Atlantic Ocean.

When the autocratic rule of the League over so many Indian sovereignties, the vast territorial extents of that domination, the sachemships, with pre-historic foundation and hereditary caste, the composition of the respective nations, composed as these nations were of trained aberiginal warriors, and the system of tribal, of national and of confederate government of the Iroquois League are considered, the "Chanted Vesper" phrase used in connection with missionary work in the Iroquoian cantons by some of the most learned and intelligent men in North America, at the time, appears in all its vapid absurdity.

In compliance with the petition of the Mohawk nation, the Father Superior of the Jesuits at Quebec organized the "mission of the martyrs," as it was subsequently named, and sent Father Jogues as its apostle. But in the meantime the Mohawks had declared war against the French, and when the missionary expedition entered upon Mohawk soil, its chief was warned that he was on hostile territory; his escort precipitately fled and left him with his personal attendants.

He was captured, and in a few days the head of this holy priest



¹ Henepin, Voyages, etc., p. 54.

² Dr. Shea's Colden, p. 15.

was fastened upon the outer postern of the Mohawk castle. This martyrdom occurred in 1646.

The subsequent missions in the Iroquoian cantons need not be described; they have been briefly and pathetically summarized by Dr. Shea and other historians, but their true and graphic detailed history is only attainable in the voluminous records of the missionaries themselves, known as the "Relations," which have been published in the language in which these accounts were written by the venerable actors in the dramas which they describe. They cover a period of time running about fifty years and ending in 1710.

In the meantime, the Dutch régime on the Hudson had been succeeded by that of the English, so that the "Country of the Lakes" intervened between regions actually occupied by people antagonistic in race and creed.

It would not be just, however, to pass too briefly over what had been accomplished during the Iroquois missions. In the Mohawk nation, whose soil had been sprinkled with the blood of the martyrs, Goupil and Jogues, great results had been obtained during the respective missions. The subsequent missionaries found this race of warriors steeped in the vilest state of debauchery, and the unfortunate women and children in the cantons in abject misery.

These heroic priests went to work to redeem the Mohawk warrior from degradation, and after a hard battle succeeded in excluding English rum from the cantons; they then entered upon the work of evangelization, and succeeded so well, that they numbered among their converts Krin, the head sachem, and others of renown, sachems, chiefs, and warriors. Chapels were built in the three fortified cantons; sodalities of the Blessed Virgin were established, at whose meetings the rosary beads were told by warrior as well as squaw; and a school was established for the instruction of Mohawk youth.

Sobriety and order existed under Christian control, where vice and debauchery had reigned. The hard lot of the Mohawk squaw in her conjugal relations was mitigated; and as she was taught the sublime lessons of Christianity, she found consolation in offering her travail to the Mother of Sorrows.

What was accomplished in the Mohawk cantons, the stronghold of Paganism, was, to a greater or lesser extent, the experience in the other Iroquois cantons, but more especially in the capital of the League.

Onondaga became, in time, the centre of Christian life. Here were achieved the greatest intellectual triumphs in the conversion of the sachems, with whom the missionary fathers lived like the brothers of one family; and among the Onondaga people, who were by nature the most gentle of the Iroquois race, the truths

of Christianity were universally accepted. In the chapels the religious services were conducted with as great regularity, and with as much formality as in the churches of the French colony.¹

One of the most celebrated conversions at Onondaga was that of Garacontie, the head sachem of the Iroquois League; the baptism of this convert, who lived and died in the odor of sanctity, is described by Dr. Shea: "The ceremony," he says, " was performed with great solemnity in the Cathedral of Quebec, before an assemblage such as the French settlements alone could show. In that pile, all feudal in its architecture, amid the descendants of the Crusaders, men of noble lineage in the olden world, amid Hurons from Montmorency, Tiontonates from Mackinaw, Mohegans from the Hudson, Algonquins from the St. Lawrence, Chippeways from Lake Superior, and Iroquois from every tribe from the Mohawk to Lake Erie, stood Garacontie, to receive baptism at the hands of Laval, as the chieftain Clovis did centuries before at the hands of Remy. With calm attention he followed the rite. Clear and distinct were his responses as to the doctrines he would embrace, positive, to sternness itself, his declaration of adherence to Christianity. Then amid the thunder of the cannon of Fort St. Louis, with the Governor-General standing by as his sponsor, the waters of baptism flowed on his head, and the greatest Iroquois of the epoch, the virtual head of the League, was now the Christian Daniel Garacontie." 2

This scene might be painted in illustration of the progress of civilization in North America. It would make a vivid picture.

The convert in his native costume, his distinguished sponsor in court attire, the group of armed descendants of the Crusaders, the Indian chiefs from nations inhabiting the soil from the Atlantic Ocean to Lake Superior, the black and the brown robed missionaries, smiling as they bowed in recognition of some neophyte from far distant regions to which they had borne the standard of the Cross, the tall and venerable Bishop Laval in his rich robes, the altar ablaze with waxen lights, and the vaulted roof of "that pile all feudal in its architecture," with the background of painted warriors, and colonists,—such a scene would inspire an artist to place on canvas a picture rivalling in historic interest Stanley's great painting of Red Jacket.

How suggestive such a work of art would be, if suspended over



¹ Such was the established order of religious life, that a synod of all the fathers engaged in the Iroquoian field of missionary labor, was held at Onondaga, where during ten days these saintly and distinguished priests, enjoyed the sweets of familiar intercourse, so dearly prized by all members of religious orders.

² Shea's Missions, p. 280. Dr. Shea draws his account from the relation of the Jesuit Fathers, 1669-1670, c. ii.

the cathedra of the Professor of History in the University of Michigan, with the title of "The Chanted Vespers!"

In the meantime the French governors, who had become weary from their unsuccessful efforts to placate the Iroquois, had formed an alliance, offensive and defensive, with the Algonquian nations; a measure of profound political wisdom and of far-reaching results. By this alliance was secured control of the shores and islands of Lakes Huron, Michigan, and Superior, the Illinois region, and the vast extent of territory lying between the Sault de Ste. Marie and Hudson's Bay.

The council-fire of the Algonquian confederacy had, from times remote, been in the custody of the Chippewa nation, and the seat of its power was on the southwestern shore of Lake Superior. 1 It included 104 distinct organized "nations," or tribes, many of whom in the East had been subdued by, or were tributary to, the Iroquois; its leading nations in the West were the Chippewas, the Creeks, the Ottawas, the Potawotomies, and the Miamis; and in the east, the Abnakis, the Micmacs, the Mohegans, the New England, Virginia, and southern nations. The unconquerable Algonquian nations were deadly foes of the Iroquois. While, therefore, the young colony of New France might suffer from the predatory inroads of the Iroquois, there was behind its political fabric the support of the most numerous confederacy of the Indian nations on the North American continent. But New France did not desire war; peace was necessary to the welfare of the colony. Catholic missionaries sought the heads of the Algonquian nations in their far-distant homes, and, on the part of the Governor-General, induced them to send delegates to a general council of the American Indian nations to be convened at Quebec. At this great council a basis of peace was formulated, and promises were made by the opposing nations that the treaty agreed upon would be faithfully adhered to. This was the political status between the French, the Iroquois, and the Algonquian powers about the middle of the seventeenth century.

There was a fourth power, having no share in this treaty, the colonial English power, jealous of the advantages gained by the French in the west, and bitterly opposed to the evangelization of the Iroquois cantons by priests from Quebec.

During the missionary epoch in the "Country of the Lakes," about once in each succeeding decade, as often as the Iroquois seemed about ready to settle down in peaceful Christian life, a storm would arise, either in the Mohawk or Seneca cantons, and the war-cry be raised against the French or their allies.

While all was apparently tranquil in the Onondaga valley, the

¹ General Cass, His. Lec., p. 14.

death-song may have been sung on the Mohawk. The League itself was not at war; some one of its nations was. There was a large enough Pagan element quietly waiting for a pretence to shed Christian blood in all the cantons. The lives of the missionaries became imperilled and they withdrew to Quebec. Time and again did this occur, but as often did the missionaries return to their flocks.

Who incited these disturbances? The English governors, covertly, by their emissaries, aided with rum, while France and England were actually at peace.

A refuge had been founded at Loretto near Quebec for the fugitive Christian Hurons; their descendants may be seen there still.

A similar retreat was founded at La Prairie for the Christian Iroquois when forced by adverse circumstances to expatriate themselves; no more instructive spectacle than a group of the Iroquois race at Caughnawaga at the present day may be witnessed by those who understand the relation this hybrid people bear to the missionary period in the Iroquoian cantons two centuries or more ago. But the missionaries had other evils to contend against than English rum, English jealousy and Pagan malignity. The fatuity and double dealing of the French governors compromised at times the situation of the missionaries. This is an historical fact. One particular instance may be quoted from Dr. Shea; the passage was written while the fire of youth still warmed his chivalrous blood. "Yet not Dongan" (the English governor) "but Denonville" (the French governor) " was to give the last blow to the Iroquois missions," says Dr. Shea, "ending as they had begun, in the captivity of a missionary." The incident referred to is that related by Charlevoix, which should be read to be fully understood and to appreciate the indignation of the great Catholic historian, who says: "Will it be credited that a Catholic governor could sport with the life of such a devoted man? Yet so it was. Father John de Lamberville little knew as he bent his way to Onondaga that he was the dupe of an act of treachery, as savage as any by which the faithless Iroquois had sullied their name."

Father John de Lamberville had lived the better part of his sacerdotal life among the sachems at Onondaga, where he was loved as a father and revered as a saint. The scene in the council-

^{1 &}quot;La mauvaise administration," says Chateaubriand, "du Canada, les fausses demarches des commandants, une politique étroite ou oppressive, mettaient plus d'entraves aux bonnes intentions des Jesuits que l'opposition de l'ennemi," Oeuvres de Chateaubriand. Tome iv., c. viii., p. 257. Paris ed.

² Shea's Missions, 314, 15. Charlevoix ii. 335. N. Y. Doc. Hist. i. 216. Charlevoix received from the lips of the Ven. Father de Lamberville the story he relates, after the latter had returned to France.

house of the sachems when the venerable missionary was called upon to explain his connection with the outrage referred to, was pathetic in the extreme. But the sachems knew Father de Lamberville too well to believe him guilty; they not only spared his life, but sent a strong and reliable escort to see that he reached Canada in safety.

During the first decade of the eighteenth century, when the Iroquoian missions were once more re-established and began to flourish, they were in their turn destroyed by the intrigues as well as by the overt machinations of the English governors.

In the meantime many distinguished converts had moved from the cantons to La Prairie, where they could enjoy that peace denied them in their sylvan homes. Among the number may be mentioned the saintly Catherine Teh-gak-wita, the "Lily of the Mohawk," at whose venerated tomb, it is claimed, many miracles have resulted from her intercession.

The history of the Crusades, perhaps the entire history of chivalry itself, contains no chapters more vivid than the history of the Iroquoian missions, constituting, as it does, "the romance of the country of the lakes of New York"

In both histories, is there an example to be found in any one order of knighthood more romantic or more chivalrous than that of the twenty-five distinguished and professed members of one religious order, who imperilled life and endured such privations, or who labored so unceasingly for the accomplishment of such a noble object, as was the evangelization of the Iroquoian race?

In the war between England and France for supremacy on North American soil, the Algonquian League on the side of the French was opposed by the Iroquoian League on the side of the English. The result of that struggle, due in a great measure to the corrupt influence of the profligate surroundings of the court of France, was fatal to French rule on the American continent.

When, a decade or so later, the American colonies rebelled, the British sought to enlist the Iroquoian League on their side. The general council of the sachems, however, declined to interfere in a family quarrel they disliked, leaving it optional with any of their nations² to take sides in the contest, as was their right.

The Mohawk and Cayuga nations were won over to the British side. The warriors of these nations did not participate in the ope-

¹ There is no question as to the final results of the Iroquoian missions, had the efforts of the Fathers not been thwarted as they had been; the race would have become Christian, and the League would have become a neutral power.

² In the meantime a sixth nation had been added to the League under peculiarly chivalric operation; this was the Tuscarora, which had been assigned territory near Niagara.

rations of regular warfare, but they were sent in bands against the defenceless hamlets on the American borders.

The rifle, the tomahawk, the scalping-knife and the torch, directed with the inherent ferocity of these savages, accomplished their bloody work, the victims of which were old men, women and children. The debt of wrath piled up against them at the close of the Revolutionary War left them no hope of mercy, and they fled to Canada.

The hegira of these nations disrupted the political autonomy of the League of the Ho-de-no-sau-nee, which, after an existence of three centuries, came to an inglorious end.

The romantic domain of the "Country of the Lakes" had, during a century, been changed from its pristine attractiveness of missionary times. Comfortable homes, extensive cultivated fields, meadows, herds, orchards and vineyards, had replaced the cabins and the corn-patches; from the Mohawk to Niagara was a continuous garden.

The Continental Congress decreed the punishment of the Iroquoian people for the devastation of their frontier hamlets, and to General John Sullivan was assigned the task of inflicting this punishment; he led his veteran regiments upon Iroquoian soil, and the work of devastation was made complete from the Mohawk river to the shores of Lake Erie.

The Tuscaroras being on the British side of the Niagara river, escaped. One after another the strongholds and castles were razed, the cantons destroyed, and the orchards cut down; the beautiful "Country of the Lakes" was made desolate, and in the process of punishment, Christian and Pagan, friend and foe, suffered alike.

But the League still held title to the soil of their ancient domain, which, in the process of civilization, had to be acquired by treaty and purchase.

In time there only remained to the remnants of the nations of this once powerful confederacy a few "reservations," from whose forests the game of the hunter had long since fled.

The study of the history of the League of the Ho-de-no-sau-nee is so deeply interesting that he who becomes familiar with its romantic and tragic incidents cannot look upon the picture of a bark canoe, or upon one or more aboriginals, without a vision of exciting scenes which will never leave his memory.

Judge Sibley, of Detroit, thus writes in 1802 to Judge Burnet: "Nothing frightens the Canadians like taxes. They would prefer to be treated like dogs, and kennel under the whip of a tyrant, than contribute to the support of a free government."

¹ American Statesmen, Cass, p. 31.

Probably no writer cognizant of the status of the French race in Detroit at the time mentioned, would have quoted these remarks of Sibley; they are misleading and unjust.

Judge Cooley dispassionately says: "If the wisdom of the President in his appointments had been equal to that of the legislation, the early history of the territory (Michigan) would have been more orderly, and perhaps more prosperous also. But Mr. Jefferson with singular want of tact and judgment, sent to this distant frontier territory, as rulers for its rough and peculiar population, a number of persons who were not only ignorant of this part of the country and of its people, but were without practical acquaintance with similar communities elsewhere. It was not to be expected, therefore, that they would readily and easily come into sympathetic and cordial relations with the people they were to govern. Some of them also had personal peculiarities and deficiencies which would render entirely improbable a successful and orderly administration of affairs."

Judge Campbell, who was a native of Detroit, says: "The British and other travellers who visited the country in 1796, and shortly thereafter, expressed their surprise at the number and wealth of the merchants and the extent of their business, and stated that all kinds of articles were nearly as cheap in Detroit as in the eastern cities. The people were gay and prosperous, and indulged as freely in the pomps and vanities of dress and amusements as their contemporaries in the elegant circles of the East. The truth-telling inventories of the estates of the inhabitants who had done with the world, include plate and silks and all manner of luxuries, as well as the titres de noblesse, which had ceased to be important among the new-fledged republicans."

We have said that no writer familiar with the condition of the French race at the time would have borrowed Judge Sibley's remarks, nor would he have sought, like the biographer of Cass, to describe, this race as a lazy, shiftless, ignorant class, living mostly in cabins or small houses on "pipe stem" farms which were indifferently cultivated.

We shall go further than Judge Cooley has gone, in describing the American functionaries who came to rule Detroit and its territory at the epoch under consideration. As a rule these gentlemen were talented and thrifty. Though their salaries were slender and they came poor, they generally died rich. They came to administer the laws of the United States over a people who were nearly all

¹ American Commonwealths, Michigan, by Thomas McIntyre Cooley, p. 147, 2d ed. Boston, Houghton, Mifflin & Co., 1886.

³ Outlines of the Political History of Michigan, by James V. Campbell, 1876, p. 212.

Catholic, and whose religious interests had been carefully guarded by an unbroken line of pastorate of a century's duration. The language of this people was French, their customs and amusements were such as had prevailed, and for that matter still prevails, in the fair provinces in France from whence their forefathers had come.

The administrators of American laws were alien both in religion and in language to the people who possessed the soil on the shores of the Detroit, as well as to those of the great majority of the business men whose enterprise and wealth had made the post second only in importance to that of Montreal. No objection need be entered to the religious prejudices of the average American existing at the time in question in the thirteen federal States; the objection lies, as Judge Cooley so guardedly states, in the sending of such men to Detroit at the time, when far abler material was available in its resident population.

The French race on the American side of the river, when freed from British rule, were brought within the pale of the American Union, and became its citizens; they were neither outcasts nor homeless adventurers, but bona fide citizens, entitled to all the privileges of such citizenship. Moreover, the freedom of their religion, the use of their customs and of their language had been guaranteed them by treaties between France and England.

The right of conquest carried with it only control of the soil, but not control over the possessions, rights and immunities enjoyed by its inhabitants. Such rights could not be violated without national dishonor.

The impropriety, we might add the injustice, of sending men as representatives of the Union to Detroit, who honestly believed the Pope to be Antichrist, who were ready to swear by "Fox's Book of Martyrs," who despised Catholics for "idolatry" and other hideous abominations attributed to "papists," will be admitted, and more fully explain what Judge Cooley failed to say.

Moreover, these otherwise intelligent officials, were disqualified because they were devoid of an accomplishment, which at the time, in most countries, was an essential in the make-up of a gentleman—the practical knowlege of the French language, which was the language used by the people of Detroit and its vicinity. This defect, probably, did not worry these alien officials, as much as it annoyed and inconvenienced the people.

With regard to the intelligence of the French race, Monsieur Rameau, a French traveller and author, speaks as follows: "A croire certaines gens aujourd'hui, il semblerait vraimant que l'art d'écrire soit une innovation merveilleuse que l'invasion Anglaise (Americain) aurait importé en ce pays;—mais avant cette époque un grand nombre de vos aïeux lisaient et écrivaient fort bien, et je

dois dire qu' en parcourant les vieux papiers, j'ai été même étonné, vu le peu des resources dont on disposait, et les difficultés de toute nature qu' on devait éprouver à instruire les enfants dans ce lieu si reculé, j'ai été étonné souvent de trouver dans l'ancienne population du Détroit une si forte proportion de personnes sachant lire et écrire.

"Or ne croyez point que cette écriture, fut écriture d'apprentis, begayant sur le papier des lettres grossières et mal assemblées, —souvent elle est fort belle; combien de fois en compulsant les vieux actes, ai-je cherché à deviner dans les formes capricieuses de ces lignes séculaires, l'empreinte du caractere et des pensées de ceux qui les avait tracés.

"On ne voit point alors de ces écritures couchées, natives, toutes semblables, d' une régularité fade, laides dans leur monotonie comme le produit d' une fabrique à vapeur, et trop souvent illisibles.

"Ces signatures sont larges et caracterisés, variés mais toujours gravées d' une main firme, elles sont fortement assises et distinctes, indice d' unee pensée calme et sûr d' elle même, bien établi dans sa vie, qui sait d' ou elle vient et ou elle va; leur contexture n'a point de précipitation, c'est l' expression d' un homme qui réfléchit à ce qu'il fait. Chacun y laissait la trace de son caractère comme il convient à un être humain et intelligent."

The grants of land made to the original colonists were mostly uniform in extent of arpentage, averaging from seven hundred to one thousand feet frontage on the Strait, and extending back in the



Rameau, Notes, etc., Montreal, 1861. The text is here quoted as more expressive than any translation. [In view of the arrogant pretensions to a monopoly of all learning by the average Anglo-Saxon, it may be well to translate this interesting passage. "Some there are who really seem to regard the art of writing as a wonderful innovation imported into this region at the time of the Anglo-American invasion. But before that epoch large numbers of your forefathers read and wrote very well. Indeed, I must say that in perusing old papers, I have often been astonished, considering the paucity of resources at their command and the difficulties of all kinds which they must have encountered in the instruction of children in these remote parts, at finding that so large a proportion of the ancient population of Detroit could read and write. Nor was their writing the rude, ill-looking scrawl of the beginner; in many cases it is extremely beautiful. How often, whilst examining those old documents, have I not occupied myself in conjecturing from the capricious flourishes of those lines written in a generation long since past, the bent of character and the thoughts of those who had penned them. The writing of those days was not done by fixed rules, or in haste, or all alike with insipid regularity and unpleasing monotony, as if the product of a machine, and too often illegible. The signatures were bold and expressive of individual character, varied, but ever written with a firm hand, well-formed and distinct, the index of a calm and steady soul that has no doubts as to the meaning of life, but knows both whence it comes and whither it tends. The absence of precipitation in the handwriting argues a man who reflects upon what he is doing. Each writer has left the impress of his character upon his writing, as becomes a human and intelligent being,"—EDITOR.]

forest about three miles. This division of the soil was wisely made in the interest of the colonist, and no one grantee possessed a greater frontage than the maximum stated. By this division each colonist had access to the waters of the Strait as a fishery for domestic uses, and for convenience, on which in summer his boat enabled him to carry his family to church, or to visit friends, or to take the products of his farm to be sold to the merchants at the post; while in winter the same conveniences were obtained by his ponies and sleighs on the ice.

When building his home, the line of his neighbor's farm had been chosen as a site for the homestead, not only for social intercourse with his neighbor, for the French were a genial and a happy race, but for mutual assistance in the hour of danger. An Indian population three times as numerous as that of the French surrounded the latter on both sides of the strait.

Four distinct Indian nations had their homes on the soil in this vicinity, and all along the frontier line Indian wars had retarded civilization; the thirst for fire-water tempted the uncontrolled savage to covert pillage or worse—outrage.

The colonist had learned but too dearly by experience, that surplus wealth, either in money, in cattle or in grain, only excited the cupidity of the lawless savage.

The extent of his cultivation, for obvious reasons, included his orchard of delicious fruits, his meadows, his fields for corn and for grain, while the untilled forest served as a pastorage in summer for his cattle and his ponies, and in winter as a hunting field, when not engaged in harvesting surplus timber or wood, which always found ready sale at the post.

The sneer at the homes of this race standing on "pipe stem farms," is no less unjust and as contemptible as the stigma of laziness.

"From our consideration of the agriculture of the early French settlers on the Detroit," says Bela Hubbard, "we turn naturally to their homesteads. We form some judgment of a people from the houses they live in. The better class of dwellings of the French habitants were of quite a substantial character, considered as mere timber structures.

"They were built of logs, squared and covered with clapboards, and the roofs shingled with cedar. They were of one or two stories, according to the need or ability of the owner, but were never ambitious.

"Generally they were one full story, the upper or half story being



¹ P. 131, Memorials of a Half Century in Michigan and the Lake Region, by Bela Hubbard. Putnam and Sons, New York and London, 1888, octavo, pp. 581.

chiefly within the roof, which was high, and lighted by small dormer windows projecting on the front and rear sides. The entrance was in the centre, and a hall ran from front to rear. A low and perfectly plain veranda was another usual feature."

One of the oldest and most noted structures of this class was the "Cass House," which remained intact more than one hundred and fifty years.¹

Another old domicile of the times of French régime, the "Lafferty House," stood half a mile below, and was torn down in 1861, to give place to structures better suited to the wants of modern times. It was erected in 1747, and was, at the time of its destruction, in excellent preservation; the timbers were heavy and solid, and the stone chimney set off the large, open fire-place which marked an age of hospitality and good cheer. Another well-known old mansion, the "Knaggs House," was for several years the residence of Bela Hubbard.

It consists of two parts: one a low structure of a single story, with an attic. It is of unknown age, and like the "Cass" and "Lafferty" houses bears marks of Indian outrages. The panes of glass throughout all the windows were a curiosity, being of a size entirely disused and no longer sold by dealers.³

With the testimony of Judge Cooley, Michigan's well known jurist, as to the "manner of man" the American administrator was in these early times, with the testimony of James V. Campbell, Michigan's Chief Justice, and of Bela Hubbard, as to the status of the good old Catholic colonists at the same period, their reputation may stand against the imputations thrown out by this newly fledged writer upon the Detroit of the olden time and its Catholic people. But there is one imputation implied against this race in Judge Sibley's bilious-colored letter to Judge Burnet, which we shall not leave unnoticed. Were the French race loyal to their new American rulers? We shall let Mr. Hubbard answer.

"I cannot omit," he says, "to mention a commendable trait in the French character—their early and sincere attachment to the United States and her republican institutions." The italics are ours.

"To be known," he continues, "as a Frenchman was to be known as a patriot; and in the times which tried men's souls—and few parts of our country had more varied and bitter experience—the Frenchman was always our reliable and active ally; cool and unflinching in danger; shrewd and watchful when caution was most needed.

¹ St. Martin was the colonist's name who built this house.

² La Ferté was the original owner's name and ancestor of the Laffertys.

We saw glass 5 x 6 in an old house on the St. Lawrence, near Montreal.

"If a man was wanted for a dangerous enterprise, it was a Frenchman who was chosen."

Rameau, who spent a long time in Canada and Detroit, in search of documentary evidence relating to a colonial land grant, went through the French archives of St. Anne's Church, Detroit, which cover a period of nearly two centuries, several times, and examined all the old records in this locality for the *actes*, as he calls them, needed for his case. He must have become familiar with the handwriting of every French proprietor on both sides of the Strait.

His testimony establishes the intellectual status of this old French Roman Catholic race of Detroit, in the olden time, in spite of all the sneers of "pipe stem" writers.

But there is a still more serious accounting to be called for in the concluding chapter.

To write about Detroit during the three first decades of the present century, and especially to outline the history of Cass during this same period, and to fail to mention his illustrious contemporary, the Very Rev. Gabriel Richard, is as great an omission as it would be to write the history of the American Revolution leaving out the name of George Washington.

Father Richard's participation in the current events of his times was so prominent that local historians of eminence have assigned to this priest and his works an honorable place in the early history of American rule, in the history of religion, and in the advancement of civilization under that rule in Detroit and in the Northwest Territory. As time has developed western history, the historic form of Richard becomes more distinct in its grand outlines.

Judge Cooley says of him: "Father Richard would have been a man of mark in almost any community and at any time."

Judge James V. Campbell, who in his younger days was a contemporary of Richard, says: "His tall and sepulchral figure was familiar to every one during the long period during which he filled his sacred mission. He was not only a man of elegant learning, but of excellent common sense and a very public spirited citizen. He encouraged education in every way, not only by organizing and patronizing schools for the immediate training of his own people, but by favoring all other schemes for general intelligence. He brought to Detroit the earliest printing press that was known

¹ Memorials, etc., p. 142.

In the catalogue of "countersigns" appertaining to the regulations of the United States Army, will be found in its place, to be used in its turn: "Major Antoine De Quindre." This officer was one of the old French race of Detroit, and a scion of the noblesse of France. His distinguished bravery during the war of 1812 in this locality is thus acknowledged by the American Government in a manner which invites emulation and creates an imperishable record of renown.

² Michigan, Cooley, p. 141, 2d ed.

in the territory, and compiled and published some religious and educational works for his own flock, and some selections from French authors for reading. He was an early officer of the university (the University of Michigan now at Ann Arbor) and a teacher or professor in it. His acquaintance was prized among Protestants as well as Catholics. His quaint humor and shrewd sense in no way weakened by his imperfect pronunciation of English are pleasantly remembered by all who had the good fortune to know him; while his brief prayer for the legislature, that they might make laws for the people and not for themselves, was a very comprehensive summary of sound political philosophy."

When in 1789–92 the church in France, the monarchy, the nobility, and the aristocracy of the robe and of the sword had been engulphed in the whirlpool of blood and terror, while it was still possible for a priest to leave France, a group of young and distinguished Sulpicians, by a previous arrangement between l'Abbé Emery and Bishop Carroll, left France and came to Baltimore. This was in 1792.

Among this group was the Rev. Gabriel Richard, scion of a good old Catholic stock, having been born in Saintes, France, in 1764.

He was soon after assigned to missionary work in Illinois, where he remained until 1798, when he was appointed assistant to Rev. Michael Levadoux, pastor of St. Anne's Church in Detroit, and the first incumbent under American hierarchical jurisdiction. Father Levadoux was also a Sulpician, as was Father John Dilhet, who had accompanied Father Richard.

An outline of the situation in Detroit at this period has been given in the preceding pages. It was an old Catholic city, but had recently fallen under the political jurisdiction of the federal government.

The church of St. Anne at the time was the fourth of its name in the line of succession; the original chapel having been dedicated to the mother of the Blessed Virgin by Father Constantine Delhalle, a Recollet monk, in 1701. Its founder was killed by an Indian's bullet six years later; the chapel and its successors were in their turn destroyed, the present church having been built by Father Simplicius Bouquet, another Recollet monk, in 1754, and consecrated in 1755 by the Bishop of Quebec.

The vicarial jurisdiction of Detroit included the care of the



¹ Campbell, Outlines of the Political History of Michigan, p. 255. Catholic authorities may be referred to for light upon the outlines of Father Richard and his times, as follows: Annals of the Propagation of the Faith, 1800-33; "Spalding's Life of Flaget," U. S. Catholic Magazine, vol. vi.; and the Life and Times of Bishop Carroll by Dr. Shea.

² The St. Anne of 1798.

French race living on the water-line beginning at Lake Erie and extending upward to Lake St. Clair. Its dependencies embraced the old missionary stations on the islands and shores of Lakes Huron and Michigan.

In 1800 Father Richard commenced a tour of the lake dependencies, taking passage on a government vessel on June 20th, and after a stormy voyage reached Mackinac Island June 20th.

He remained on the island about two months, teaching and administering the sacraments; he then visited the Ottawas on Lake Huron, visited St. Joseph's Island, ascended the St. Mary's river to the Sault, and returned in October to Detroit. He wrote an account of his mission to Bishop Carroll. The Indians had mostly lapsed into paganism and had to a great extent become brutalized from debauchery.

He described the condition of the half-breeds and explained the great necessity existing for missionary laborers in the Lake Regions of Michigan, Wisconsin and Illinois.

In the meantime Father Levadoux, whose health began to fail, had applied for and obtained permission from Bishop Carroll to return to France. Father Richard succeeded to the pastorate and the vicarial rights, having Father John Dilhet as his assistant.¹

Looking into the spiritual condition of the parish, he found some irregularities growing out of the annual visits of the furtrading employees and the convocations of the Indian tribes; these he corrected as far as lay in his power.

He enlarged the church, presbytery and school houses; but, having no suitable teachers available he instructed and prepared four young ladies of wealthy families as teachers, and placed them in charge of a seminary for the higher branches of education of their sex. Not unmindful of the intellectual wants of the young men of his parish, he opened a seminary in which he and Father Dilhet taught the higher branches, and lectured upon religious history, literature and the sciences.

This was the condition of the parish, when on the eleventh of June, 1805, Detroit was stricken with a calamity as sudden as it was overwhelming. The city was entirely destroyed by fire—and, as Father Dilhet writes, "in three hours, between nine o'clock and noon, nothing was to be seen of the city except a mass of burning débris and chimney tops stretching like pyramids into the air. We had barely time to remove the vestments and furniture of the church and the movable property in the schools."

Father Richard had witnessed in this brief time the destruction

¹ Father Dilhet was a devoted priest, of fine literary culture, and a gentleman. He was recalled to France in 1805,

² White's Memoir, p. 49.

of the material evidence of his six years' hard work, of church, presbytery and schools, as well as the homes of his parishioners; there remained only smoking ruins.

The old colonial city was completely wiped out of existence. Much inconvenience and suffering among the people ensued; but the indomitable pastor was equal to the emergency. He at once procured shelter tents from the fort for the women and children who had no refuge, and using not only his personal means but his credit as well, he purchased food and other temporary necessities for the homeless and destitute, without regard to creed or race.

St. Anne's Church, presbytery and schools were soon after located in improvised buildings in Spring Wells, about a mile below the site of the ancient church.¹ In 1807, there being no other minister in Detroit, Governor Hull invited Father Richard to hold non-Catholic meetings, if such a term may be permitted, on Sundays in the new Council House; these meetings were regularly held at noon, and were attended by the Governor and family, by the officers of the garrison with their families, by most of the officials and by the non-Catholic merchants.

The lectures, delivered in the English language, were upon Christianity and kindred topics, without controversial allusions.

In 1808 Father Richard set up the first printing press erected in the Northwest territory, having brought from the East the first practical printer known in the West, Mr. A. Coxeshawe. The same year the educational establishments were completed, and comprised: Primary schools for boys and girls, a seminary for young ladies under charge of the four teachers mentioned, an academy for young men, under the learned pastor's direction, assisted by M. Salliére, a young professor of literature, chemistry and astronomy, whom Father Richard had brought from France; and a school for the technical education of Indian girls. The attention of the present promoters of literary culture among Catholics. is directed to the fact, that eighty-four years ago in Detroit. Father Richard's seminary for young ladies, taught by the very crème de la crème of the old families of this old city, and the academy for young men, having, besides the pastor, a French professor of ability, were both supplied with astronomical, chemical and geographical apparatus; while in the school for teaching useful arts to Indian girls, it may be mentioned, that among other appliances used, were a score or more of spinning wheels.

In the meantime this pioneer Catholic priest, this apostle and

¹ These premises continued to be used until 1820, when the basement of the new church was dedicated.

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promoter of literary culture in the Northwest, edited and published the following works: "L'Ame Pénitente," 16mo., 1809, pp. 300; "The Child's Spelling Book," 16mo., 1809; "La Journée du Chrétien," 16mo., 1811, pp. 350; "Les Ornemens de la Mémoire," 16mo., 1811, pp. 130; "Epitres et Évangiles, pour les dimanches et sêtes, Français et Anglais," 16mo., 1812, pp. 396; "Petite Catéchisme Historique," 16mo., 1812, pp. 300; "Journal des Enfants," 16mo., 1812, pp. 196.

At the period of the publication of these works, the preparation of which for the press, their editing as well as their proof reading, involving a vast amount of labor, books suitable for Catholic readers were exceedingly rare in Detroit; they could only be obtained from Montreal or New York, and were not always of the kind desired; besides, their high prices excluded their use amongst most families. These books supplied a great want existing in the old city, even before, but especially since the destruction of the city in 1805.

Their publication at the time, and under the circumstances, accomplished a double purpose, while attesting the aim of their editor to have been to teach, to edify, and to perfect intellecually, as well as morally and religiously the youth of his own generation of pastoral care.

To Father Stephen Theodore Badin, a brother Sulpician, the first Catholic priest ordained in the United States,² belongs the honor of being the compiler of the first Catholic work published in the West,³ the "Principles of Christianity," Bardstown, Ky., 1805. But for Father Richard is claimed the honor of editing and publishing the first devotional, educational and literary books in the Northwest territory; and the honor of editing and printing in English the first Scriptural work, the "Epistles and Gospels," in 1812. There is, I believe, no one who questions his right.⁴

Another and a grievous calamity was impending over Detroit. This was the war of 1812. The old city, far removed from the support of the older States, was bound to suffer; and the first serious

¹ A complete set of Father Richard's books was presented by the writer to the Library of the Paulist Fathers in New York, about twelve years ago.

² By Bishop Carroll, in 1793, at Baltimore.

³ Appleton's Cyclop, of Am. Biog.

⁴ In his introduction to Les Ornemens de la Mêmoire, Father Richard says: "Tous les gens de goût conviennent que la connoisance de la poésie doit avoir une place distinguée dans le plan d'une bonne education. Les beaux arts en général font la nouriture et le plaisir de l'âme.

[&]quot;La lecture des beaux morceaux de poésie en particulier, élève les esprits, étend agréablement la sphére des connoissances utiles; elle produit dans l'ame les sentiments délicieux.

[&]quot; Mais cette lecture pour être utile demande un choix judicieux et de sages précautions, sourtout pour ce qui regarde la pureté des moeurs," etc.

blow felt was the pusillanimous surrender of the post by the Governor.

Priests are regarded by Christian nations at war among themselves, as non-combatants. Father Richard was every inch a priest, but each of those inches was thoroughly and patriotically American; for this crime he was arrested by the British General, and sent in irons to the military prison on the opposite side of the river, where he remained until peace was declared. In the meantime his apostolic works had experienced a great set-back, which required time and labor to overcome before their normal condition could be restored. Just previous to the breaking out of hostilities, there arrived in the city the first organ ever seen in the Northwest territory; Father Richard had imported it from France.

The condition of the French race and the humane conduct of Father Richard after the war have already been mentioned. The condition of that portion of his flock resident along the upper lakes, has also been described; his call for missionaries was responded to, in time; these were prepared, taught to speak the Indian dialects and sent to evangelize the indigenous people and others in the lake regions.

In 1808 Paul Malcher donated a farm on the river bank about two miles above the site of old St. Anne, on which was built in 1809, a succursal chapel and school for the convienence of parishioners living in "la côte du nord." According to the custom of the country, this parish was organized with marguilliers or trustees. In 1817 a disagreement occurred between the latter and Father Richard. The case was referred to Bishop Flaget who sustained his vicar and placed the succursal chapel at the "côte du nord" under interdict—in which state it remained until the following year, when the venerable Bishop came all the way from Bardstown, Ky., on horseback to Detroit in the interest of peace; his mission was successful.

To render the ceremony of the removal of the interdict impressive, a "grand procession" escorted the Bishop and Father Richard from St. Anne's to the succursal chapel, the distance being about three miles.

As a sign of the times, it may be stated, that the music of the regimental band added to the éclat of the ceremony, and as the procession passed the fort, it was saluted by a salvo of artillery.



¹ After the evacuation of the city by the British and their Indian allies, the occupants of the soil were threatened with famine, having been stripped of their movable possessions by the drunken savages.

Were it not for the assistance rendered by Father Richard, some of them would have starved, and others had no seed grain to plant until he procured it for them.

² This trouble resulted in open rebellion.

The occasion was one of general rejoicing, and an affecting reconciliation took place between the recalcitrants and their venerable pastor.¹

This event occurred June 11, 1818, and on the same day Bishop Flaget laid the corner-stone of the fifth church of St. Anne, which was completed in 1828. It was a large and imposing structure, dominating in size all other buildings in the city.

Missionary work in the lake regions was in the meantime vigorously conducted by Fathers Bellamy, Badin (Francis V.), and De Jean, under the direct supervision of Father Richard.

In 1823 he was elected representative of Michigan to Congress, serving one term only.

The results of missionary work in the dependencies of Detroit may be seen in the account given by Bishop Fenwick, of Cincinnati, who made his episcopal visitations in 1827. "Among the Indian tribes visited, morality and fervent piety prevailed, where ignorance, superstition and debauchery had ruled." The happiest days of my life, writes the Bishop, "were spent among the Ottawa and Pottowatamie Indians."

Probably the greatest missionary work accomplished under the direction of any one priest in this country during the first three decades of this century, may be claimed for the Very Rev. Gabriel Richard. Certainly in no part of the United States was there a field so extensive, or so difficult of access as that confided to his care by the Metropolitans Carroll, Neale, Marechal and Whitfield, and under Bishops Flaget and Fenwick.

Nor were his merits unrecognized by the American Hierarchy, who sent his name to Rome as their choice for Detroit's first Bishop. But Father Richard was not destined to wear the mitre on the scene of his life-work. His apostolic career was to end in a manner becoming the devoted priest he had been all his sacerdotal life. When in 1832 the Asiatic cholera decimated the Catholic population of Detroit, Father Richard and his venerable assistant, Father Francis Vincent Badin, labored among the sick and dying day and night, until the plague had ceased its ravages.

Worn out with hardships, he fell, the last of the distinguished victims of that fatal year. He was stricken with the disease, and succumbed September 13, 1832.

He had been pastor of St. Anne's for thirty-four years, and had occupied a leading place in the history of events during that period, as a priest, as an educator, as a philanthropist, as a legislator, as an apostle of literature, as a citizen and as a patriot.

¹ See Bishop Spalding's Life of Bishop Flaget, pp. 182-87.

² For Father Richard's Congressional experience see paper read by Hon. T. A. E. Weadock, M.C., before U. S. Cath. His. Soc., New York, Feb., 1892.

Fifty years after the death of Father Richard, Bela Hubbard placed four statues on the massive façade of the city hall of Detroit. These sculptured images represent four great French Catholics, whom the city is proud to honor,—two zealous missionaries, Fathers James Marquette and Gabriel Richard, and two representatives of the genius and chivalry of Catholic France, Cavalier de la Salle and Antoine de la Mothe Cadillac.

RICHARD R. ELLIOTT.

WAS TENNYSON CONSISTENT?1

TN Lord Tennyson's career—remarkable on many accounts, but I not the least so for its uncommon length and its continued productiveness down to the end-perhaps no one outward thing challenges us to reflection more than the fact that he was, from first to last, an object of puzzled surmise, a source of wonderment, and the unlooked for, to both the public and the critics. Glance at the few, the familiar facts, often retold, of his early literary history, that somehow never lose their strangeness and their curious interest. There is the circumstance, to begin with, that his first venture, "Poems By Two Brothers," the little poetic shallop, as we may say, in which he and his brother, Charles, embarked in 1827, and spread their light sails to catch a favoring breath from the Muses—that this first venture gained no recognition at all; and, what is worse, did not deserve recognition, since it gave no clear promise of the good which Alfred Tennyson was to achieve in his art. He was only eighteen years old then, and it is hardly surprising that his immature verses should have failed to impress readers with the same confidence in his latent power, which he himself, being a true poet, must have felt. Still, Bryant's "Thanatopsis," which has become a sort of classic, in America at least, was written by a lad even younger than the Alfred Tennyson of the "Two Brothers" period. What does appear strange is that the Englishman who was to become a worthy laureate and one of the most representative poets of his nation, should not have uttered in the dawn of his career, at least, a few notes which might now be



¹ The Death of Œenone, Akbar's Dream, and Other Poems. By Alfred Tennyson, Poet Laureate. Macmillan & Co.: New York and London.

recalled as a fit prelude of the sustained harmonies to which he afterward gave voice.

Then came his volumes of 1830 and 1832, which contained such wonderful poems as "The Deserted House," "Mariana," "Œnone," "The Miller's Daughter," "Lady Clara Vere de Vere." "The Lotos-Eaters" and "The May Queen" (since grown so popular). And here the peculiar thing is that, when the young bard had actually produced these short masterpieces, and had fairly earned recognition, the critics failed to perceive his merit and to bestow the due reward of praise, just as completely as though he had simply brought out two more books of crude verse. In the first instance he fell short of substantiating his claim to rank as a poet. In the second instance, they forfeited, by negligence, any claim they might have had to the rank of critics capable of discerning and doing justice to a new and great poet, on his merits. He laid his sterling performance before them. They did not perceive its quality, nor its capacity for winning a lasting fame. On the contrary, they greeted him with ridicule and sarcasm. It was not the critics who discovered Tennyson, or clearly saw him after he had discovered himself. Still less was it the critics who crowned him. The people—cultivated readers here and there, who did not set themselves up as professional judges, and general readers who, even if their culture was not complete, responded to natural, genuing feeling and to sincerely expressive art—these were they who discovered Tennyson; grew to love and revere his honesty and the beauty of his mind, and brought him the crown of laurel.

The people began to acknowledge him and generously to take delight in him after 1832. But, apparently warned by the coldness of the critics, he held himself in reserve for ten years; and when he once more entered the field in 1842, with another volume, he was well panoplied against all attack, whether venomous or merely obtuse. He came forward then with the "Morte d'Arthur," precursor of his "Idylls of the King," and with "St. Agnes," "Sir Galahad," "St. Simeon Stylites," "Godiva" and "Locksley Hall." The battle was ended by that book, which compelled the English-speaking world—including even the petty province of the critics—to admit that a new and commanding poet had taken his place among the great powers of imaginative literature. But, although the battle was ended, the campaign had only just begun, and Tennyson was evidently enlisted for life.

Five years afterwards, in 1847, he published "The Princess A Medley," and it was a medley that many persons did not understand. This vivid story in blank verse, with exquisite lyrics interspersed, dealt fancifully and picturesquely, yet in full vigor, with the relations of man and woman under modern conditions; bring-

ing out various intellectual and spiritual truths regarding it. Gradually it took hold on the hearts of the people; for the people saw that there was something earnest and vital in it; although some of the self-styled higher critical authorities still did not appreciate it. Three years later Tennyson was appointed Poet Laureate, to succeed Wordsworth, in 1850; and at the same time he published "In Memoriam," in one respect his greatest work, which—by a happy coincidence—won universal applause.

Yet when, five years subsequently, he issued "Maud," it was received unfavorably, a result as painful as unexpected to the author and his friends. "Maud" conquered for itself a widespread popularity afterwards. But, seeing the manner of its reception at that time, how many among the judges of literature could have predicted the result? Tennyson was now Poet Laureate, and his title to eminence in poetry, quite apart from the laureateship, was admitted on all sides. None the less, "Maud" seemed to be, in some way, a failure for the moment. It must have required fortitude on the author's part to persist in his chosen path. But he had gained the needed strength for persistence, by the long waiting of his probationary years, and the patience he had learned seems to be expressed in the poem called "Will," published in the same volume with "Maud:"

"O well for him whose will is strong! He suffers, but he will not suffer long; He suffers, but he cannot suffer wrong."

The "Idylls of the King," in 1859, made his fame secure apparently for a generation. Time, however, continued in its old habit of running on indifferently and strewing along the path, as it ran, fresh surprises and new disappointments; for example, when the world, having been charmed by the exquisite art, the romantic atmosphere and rich originality of those idylls, and having wondered sufficiently over them, began to question whether it was not a pity that they were simply idylls, instead of being an epic.

Tennyson, it is true, had never promised an epic, nor made any open attempt to produce one; and there was no good reason why he should be expected to. He had, in fact, done something much better; bringing to the public the unmatched gift of a series of stately poems on knightly and heroic themes from the half-mythical period of Arthur; narrative, but with flashes of dramatic fire in them, and of a style and mold new in English literature. "Enid," "Elaine," "Vivien," "Guinevere"—if any one, reading these, will turn to Sir Thomas Malory's quaint and various old prose romance, "Morte d'Arthur," wherein the germs of the stories are found, he will appreciate all the more the genius, the plastic power

and the vernal renewing of imagination with which Tennyson reshaped their outlines, filled them with reality, threw over their angular antiquity a delicate bloom of modern coloring and of love for nature, and spiritualized the tone and meaning of the whole. The same may be said of those additions which were made to complete the group: "The Coming of Arthur," "Pelleas," "The Holy Grail," and so on. But a conventional notion flashed lightly in sundry minds not over deep, that there ought to be a new and great English epic; and so they were inclined to murmur because they had not got it from Tennyson.

Enviers and imitators had arisen also. A trivial fashion came into vogue, of blindly ridiculing everything that he wrote in his capacity of poet to the court, or of burlesquing and even assailing with hasty detraction many of his new poems, as they came out here and there, or the volumes in which he gathered them afterwards. We do not know how far Tennyson was affected by such things; but it is certain that he seldom made any approach to explaining himself or his work to the public by preface or notes; and it was not until he published "The Window; or, Songs of the Wrens," in 1867, after the period of detraction began, that he allowed himself a few words of personal expression. The "Songs of the Wrens" had been written four years earlier, for Arthur Sullivan to set to music. This piece of work Tennyson spoke of in a brief introductory note as "a puppet whose almost only merit is, perhaps, that it can dance to Mr. Sullivan's instrument. I am sorry that my four-year-old puppet should have to dance at all in the dark shadow of these days." In these words there is a tone of despondency hard to account for as coming from the victorious Laureate, maker of poems known all around the world, unless he really was feeling the sting of gnats and the fickleness of the public.

Nevertheless, Tennyson went forward upon his own road, bringing forth in 1869, "The Holy Grail," and in 1872, "Gareth and Lynette." In 1875, however, he astonished everybody by publishing a drama, "Queen Mary," which he followed up with another called "Harold," and later with "Becket." He had won renown as a great lyrist. More than that, his

"Break, break, break
On thy cold gray stones, O sea,"

and his bugle song in "The Princess:"

"The splendor falls on castle walls And hoary summits old in story,"

with many others of like quality, had long before passed into the

popular consciousness and found a firm abiding-place there. had also been recognized as a great idyllist. But now, suddenly, he appeared as a writer of plays; an event quite unexpected and, as we may say, unprecedented, when we consider that this first composition of his in dramatic form dates from his sixty-sixth year. All his efforts in this direction were received with more or less of doubt and cavil. Still he persisted. A one-act piece of his, "The Cup and the Falcon," was performed by Henry Irving, with the result of only a nominal artistic success. Another play, "The Promise of May," which aimed to convey a moral lesson against atheism and socialism, was performed and published later on: but, unfortunately, its workmanship did not convince any one that Tennyson was a master of the stage, or even knew how to put teaching effectively in written drama. Yet, in his last years, he produced "The Foresters," founded on legends of Robin Hooda light, semi-lyrical acting play which deservedly gained popular appreciation, as well as praise for its touches of high poetic merit.

That Tennyson did not really approve himself a commanding playwright may be frankly confessed; and it should be so confessed without demur. Yet it is equally true that he did achieve at least a considerable *literary* success, though not a triumph, in the dramatic field, against odds of a certain natural disqualification for play-writing and of much deprecatory or even supercilious comment from without.

He was, above all, lyrical and narrative, by the prompting of nature. His perception of the dramatic quality, his ability to handle it, were the result of study and labor. The texture of his plays is hard and too often dry. There is absolutely nothing original in their conception or form; they are too closely patterned after old models, and one of the author's controlling ideas of play construction seems to be that so soon as he has outlined a good "situation" or got the action of the piece well under way, he must have one of his characters enter or sit down and sing a charming little lyric—sentimental, playful or pathetic—thereby interrupting the whole movement of the story. Still, if there is a lack of originality in the form and scope of these play-pieces, there is much that is excellent, original and striking in the lines they contain, and the scattered lyrics impart a freshness, a vivacity, with which the dialogue itself is somewhat meagrely endowed.

The choice of Queen Mary as the theme of his first endeavor, was not altogether fortunate; or perhaps we should say that his treatment of it was not fully comprehensive, therefore not well advised. He had an episode of religious conflict, of statecraft, of rival personal interests to deal with, through which ran the sad experience of Mary—true to faith and true to Philip, yet half dis-

tracted by the failure of her hopes of marital happiness; torn by impulsive, passionate, feminine moods, and constantly roused to fresh excitement by the war of parties and persons around her;—a heroine abounding in pathos, full of emotional power and high aspirations. Yet although he evidently makes an effort to bring out these points, the picture is harsh and crude.

Tennyson produces little more than the conventional "Bloody Mary" of the Protestants, with a penumbra of womanly traits surrounding her, to make her more real and excite something of pity for her, though perhaps more of condemnation. Choosing this theme for his initial dramatic work, he should have remembered that executions for religious belief were more numerous under Elizabeth than under Mary, and that Elizabeth died wretchedly, quite as unhappy as poor Mary, and without the consolation of faith that Mary had. It would have been wise, therefore, and would have been true poetic justice to present a companion piece setting forth Elizabeth's career, her struggles and sorrows, her persecution of Catholics and her forlorn ending of life. As it is, Elizabeth is introduced in the usual way as a sort of shining contrast, the coming maiden queen whose reign is to be pretty nearly all happiness and greatness for England; and no hint is given of the miseries, the wrongs, the tyrannies of her rule. Still it must be said that the poet shows a desire to hold the balance even, since he allows Lord Paget to say of Henry VIII. :

"for since Henry for a doubt—Which a young lust had clapped upon the back.
Crying, 'Forward!'—set our old church rocking, men
Have hardly known what to believe, or whether
They should believe in anything; the currents
So shift and change, they see not how they are borne,
Nor whither. I conclude the King a beast;
Verily a lion if you will—the world
A most obedient beast and fool—myself
Half beast and fool as appertaining to it."

So, too, when the Parliament is represented as once more affirming its loyalty to the Holy See and begging to be received again into the bosom of the Universal Church, Tennyson gives to Cardinal Pole these words:

"This is the loveliest day that ever smiled
On England. All her breath should, incense like,
Rise to the heavens in grateful praise of Him
Who now recalls her to her ancient fold.
Lo, once again God to this realm hath given
A token of his more especial Grace;
For as this people were the first of all

The islands call'd into the dawning church Out of the dead, deep night of heathendom, So now are these the first whom God hath given Grace to repent and sorrow for their schism."

And, near the close, Mary, about to die, exclaims:

"O Saint of Aragon, with that sweet worn smile Among thy patient wrinkles—help me hence!"

On the other hand, showing his want of comprehension, Tennyson represents Cardinal Pole as greeting Queen Mary with the sacred words Ave Maria, gratia plena, benedicta tu inter mulieribus, and Queen Mary replying as though it were a fit and natural compliment addressed to herself:

"Loyal and royal cousin, humblest thanks."

It is to be noticed, also, that in coming to the event of Mary's death, he merely causes a priest bearing a crucifix to pass across the stage toward the room into which she has gone. The reception of the last sacraments certainly could not be depicted on the stage; but something more than the mere dumb passing of the priest should have been offered as a suggestion of the solemnity of final consecration. In failing to convex the seriousness, the abiding faith, the sublime hope of that last hour, Tennyson was guilty of missing a fine poetic point, as well as of character interpretation and of highest truth.

Then, after Mary's death, Elizabeth says:

"I left her lying still and beautiful,

More beautiful than in life. Why would you vex yourself,

Poor sister?"

This, though perhaps in character for Elizabeth, is somewhat chilly comment. "Why would you vex yourself?" Why, indeed, except that Mary was faithful, intense and earnest. She was true to her faith and true to her husband. Her husband forsook her and she saw the true faith imperilled in England by conspiracy and unbelief, and the fact that Elizabeth would succeed to the throne since Mary herself had no son. Well, all this might seem a matter of indifference to Elizabeth, who cared nothing for religious faith, was willing to modify the same according to political needs, and apparently thought that the deepest disappointment of a royal wife's heart was no sufficient cause for even "vexation." Just here was the difference between the two royal half-sisters, Mary and Elizabeth, and here was Tennyson's opportunity to make a magnificent dramatic contrast of character, of thought, of senti-

ment and to end his play with some great ideal climax. Instead of that, he made Elizabeth admit:

"Sir, I swear I have no heart
To be your Queen,"

which was very likely true; and then, after consenting to rule, modestly, but cautiously, declare that

"if our person be secured From traitor's stabs, we will make England great."

Thereupon various lords enter with acclaim and Sir Ralph Bagen hall cries out:

"God save the Crown: the Papacy is no more."

Paget (aside).—Are we so sure of that?

Acclamation.—God save the Queen!

And so the piece ends. Essentially, there is nothing to it. It is a sheet torn out of a book, with no clear indication of what went before or what came after. Mary had a heart, and shows it in the course of the mournful complication of her life. She had a heart to love, to believe and to rule. Elizabeth says coldly: "I have no heart to be your Queen;" but she takes the queenship just the same, and wonders why her dead sister should have worried about such trifles. Then one man hurrahs that "the Papacy is no more," while another man doubts the correctness of that conclusion, and there is a general chorus of "God save the Queen." It is one of the feeblest climaxes ever tacked on to a composition cast in the dramatic mold.

What indeed are we to infer from it? A dramatist need not take sides; he need not argue, and there is no obligation upon him to make his play a polemic. But at least he should know what his aim is poetically; he should make this clear; he should carry his readers, or his hearers, along so that in the end they will be possessed of some definite impression, sentiment, or idea. Tennyson does not do this. The only conclusion we can arrive at after reading "Queen Mary" is that the Papacy may be dead, or it may not be dead; that Mary's warmth of love and faith may have been a mistake, and that perhaps Elizabeth's coldness of heart and indifference will make England great, if only Elizabeth's person is spared from stabs. If the person, in the sense of the body, is secure, the heart and the devotion to Christian faith are apparently matters of no great import, and, most of all, the maxim that is to rule existence is "God save the Queen," especially when the queen happens to be anti-Catholic. We do not think that Tennyson deliberately intended all this; but this is the

actual result when we analyze his work. Attempting to be painfully impartial, he ended by being indeterminate. Yet with his indeterminateness there was mingled a mass of Church of England prejudice, which easily rose up and clouded the liquid of his verse, like a sediment disturbed by the slightest motion.

In "Harold," which is an historical study of an earlier period, he gave expression to his always intense English national feeling, and sought to deduce a moral from the defeat of Harold following upon his broken oath and his other sins. But it is not an effective play, nor a very impressive one. A lack of deep and clear conviction in the writer himself seems to weaken and almost to annul the force of the ideas he would present, the emotions he would arouse. "Becket" is perhaps the most interesting of his dramatic works, though meant only for reading, not acting. But here also, as might be guessed from the curt title—" Becket"—by which he means St. Thomas, of Canterbury (Thomas à Becket), he presents only the secular, superficial view. His portrayal of this great and sainted martyr, who under the Second Henry passed from the high worldly office of Lord Chancellor of England to become Archbishop of Canterbury, is merely a sketch from historical documents, without insight into the supreme and ardent spiritual life of the prelate-hero. The vehemence, the tendency to impulsiveness of Saint Thomas, the occasional recurrence in this ascetic, gentle and charitable Archbishop of the powerful natural will, and of his sturdy strength of muscle as well as of brain, are all indicated; but this is done with such abruptness and crudity, and with such absence of a pervading and comprehensive spiritual atmosphere, that the picture seems harsh and inconsistent.

Apparently Tennyson wished to be graphic, to be true to facts, and to present the subject from all sides even-mindedly, but his art, and above all, his inability to understand the soul of a man like St. Thomas of Canterbury, was not equal to the problem. Still, in places, his studious effort avails to help him interpret his hero with some degree of adequacy, as in the following speech, where St. Thomas, after a talk with Walter Map on his (the Archbishop's) resistance to King Henry's oppressions and extortions toward the Church, speaks to his bosom friend Herbert of Bosham. It should be borne in mind that Thomas à Becket and King Henry II., had once been close friends, although the former's pure character had always made sharp contrast with the King's looseness, and that he sacrificed Henry's friendship to his fidelity to the Church, of which he had become the Primate in England; a sacrifice all the greater because it cost him so much personal And now the Archbishop says, alluding to the attack of the king's so-called "customs" against the spiritual supremacy and material support of the Church:

"No!—to die for it—

I live to die for it, I die to live for it.

The State will die, the Church can never die.

The King's not like to die for that which dies;

But I must die for that which never dies.

It will be so—my visions in the Lord:

It must be so, my friend! The wolves of England

Must murder her one shepherd, that the sheep

May feed in peace. False figure, Map would say.

Earth's falses are heaven's truths."

Yet, in the thrilling death-scene, where Henry's hireling knights break into the cathedral and murder the Saint at the altar's foot, the author weakly omits St. Thomas's dying words, "For the name of Jesus and the defence of His Church I am ready to die." And although as a matter of history, Henry, six months after the martyrdom, submitted to be scourged publicly at the Saint's shrine, and restored to the Church her full rights, Tennyson breathes no word or hint of this, but ends the piece with the murderers hurrying away remorseless from the sanctuary; a lame and insignificant conclusion that robs the work of all dramatic, historic or moral and religious point.

So much for these attempts in which, after all has been said, he does not appear to the best advantage. Meanwhile, writing also in his usual vein, he poured forth rapidly several volumes of songs, ballads and stories in verse; this, too, during the closing twelve years of his life. It is a fact worth observing that he published more things and a greater variety, after he was half a century old, than in the whole of his career before that age. The "Idylls of the King" appeared only after he was fifty; and during the remaining thirty-three years allotted to him he issued fourteen volumes more; that is, nearly a volume for each two years. Now, too, there comes into our hands a book which he had prepared for the press in his last days, "The Death of Œnone, Akbar's Dream and Other Poems," which he did not live to see published.

The fact about this book to which we would ask attention especially is that it shows Tennyson, in his latest hours of literary production, true to his youthful ideals in poetry and in poetic thought. For, to our mind, he was not really a philosopher, but first and always a poet, who did a good deal of philosophic thinking, yet in the artistic, emotional way only, and without ever arriving at coherent, final principles. We find Tennyson, though, in this book completed at eighty-three, as fresh in feeling when taken upon his own best ground, as quick in observation and as daintily vigorous in the interpreting of moods, as he was during his prime between the ages of thirty and sixty. The dedicatory poem, for instance, evidently addressed to Lady Tennyson, his

wife, faithful and sympathetic in old age as in youth, is called "June Bracken and Heather," and is redolent of that charming, unspoiled simplicity which characterized many of his minor poems, all the way through his life. This bit of verse runs thus:

"There on the top of the down,
The wild heather round me and over me June's high blue,
When I looked at the bracken so bright and the heather so brown,
I thought to myself I would offer this book to you,
This, and my love together,
To you that are seventy-seven,
With a faith as clear as the heights of the June-blue heaven,
And a fancy as summer-new
As the green of the bracken amid the gloom of the heather."

Here then is a poet, verging close upon a century of human existence, who makes to the partner of his life this offering of a tender love-thought clothed in exquisite word and rhythm, as sweet as though it were a wild flower plucked by a child. How it carries us back to that dignified yet tender dedication which he wrote to her many years ago:

"Dear, near and true—no truer Time himself Can prove you, tho' he make you evermore Dearer and nearer, as the rapid of life Shoots to the fall—take this, and pray that he Who wrote it, honoring your sweet faith in him, May trust himself; and spite of praise and scorn, As one who feels the immeasurable world, Attain the wise indifference of the wise; And after autumn past—if left to pass His autumn into seeming leafless days—Draw toward the long frost and the longest night, Wearing his wisdom lightly, like the fruit Which in our winter woodland looks a flower," 1

It is to be noted that, in these two poetic leaflets inscribed to his wife, the mold of the thought is the same, the choice of imagery from nature the same. In one he likens her surviving youth and freshness in age to the bright green bracken amid faded heather; in the other he hopes that if he live long, it may be with some resemblance to a flower-like fruit lingering in the leafless woods. The similiarity of the two pieces, published nearly twenty-eight years apart, is typical of Tennyson's constancy to certain ideas and chords of sentiment as well as to a few favorite modes of expressing them. In both cases, also, he speaks of faith: first, his wife's "sweet faith in him," to which he looks for support against the injurious effects alike of praise and scorn; and afterwards more generally of her "faith as clear as the heights of the June-blue

¹ The fruit of the spindle-tree, Enonymus.

heaven." This likewise is typical. He uses great words with much positiveness, but also with great vagueness. What does he, in this second instance, mean by "faith?" There is nothing to show that he meant more than a general serene and happy trust in God. And if we look elsewhere in his works for some definition of the sense in which he employed this word, or some sidelight of illumination, it is hard to find it.

It is true that "In Memoriam," which, as I have already hinted, may be accounted in some respects his greatest performance, is suffused and saturated with religious feeling; but it is the religion simply of a virtuous and pious mind, in struggle with death, loss and suffering; carrying on a war with its own doubts, but relying chiefly on its own innate power to wrestle with the enemy and to escape from the ambuscade in which it has been ensnared. Brother Azarias, in his "Phases of Thought and Criticism," has made the most searching analysis of this poem with which we are acquainted; a much more penetrating one than that of Dr. John F. Genung which preceded it, inasmuch as the religious faith and knowledge and the critical insight of Brother Azarias are profounder and more comprehensive; and in that analysis he gives the laureate credit for reaching, through his honest and prayerful struggles, a solution in accord with complete Christian faith. In accord it may be, so far as it goes. Yet we may be pardoned for thinking that Brother Azarias out of his own abundant charity, and with that generosity which leads a well disposed critic of literature to give to a fine work of art the largest recognition and the utmost meed of merit, rather than err by underrating it, has lent to Tennyson's credit that which he himself sees and feels, but Tennyson did not fully grasp, though he came near doing so. True it is again that in one of the most stirring of the "In Memoriam" swallow-flights of song (cvi.) beginning:

"Ring out wild bells to the wild sky,"

the poet reaches this climax:

"Ring out the thousand wars of old,
Ring in the thousand years of peace.
Ring in the valiant man and free,
The larger heart, the kindlier hand;
Ring out the darkness of the land,
Ring in the Christ that is to be."

But, notwithstanding the reverence for Christ evidenced here and in other passages, we should tremble for the security of Tennyson's belief and the claim of his faith to any satisfactory coherence, if we once set out to probe him logically and impartially. At the end he makes invocation to the "living will:"

"That we may lift from out of dust
A voice as unto him that hears,
A cry above the conquered years
To one that works with us, and trust,
With faith that comes of self-control,
The truths that never can be proved
Until we close with all we loved,
And all we flow from, soul to soul."

But even here we are forced to observe his voluntary limit-line. He speaks only of a "faith that comes of self-control;" still centering on self alone, though in a good sense and with a celestially aspiring aim. Between this summation and a vital realizing of Christian truth in its entirety there is a wide gap. We do not discover that he anywhere filled up or bridged it. So, too, in the early poem of "Morte D'Arthur" occurs that speech of the dying king, which is almost as often cited as it is widely known:

"Pray for my soul. More things are wrought by prayer Than this world dreams of. Wherefore let thy voice Rise like a fountain for me night and day. For what are men better than sheep or goats That nourish a blind life within the brain, If, knowing God, they lift not hands of prayer Both for themselves and those who called them friends? For so the whole round earth is every way Bound by gold chains about the feet of God."

But although this is beautiful and true as an expression of the doctrine of prayer, and although a conviction of the value of praying for the departed reappears in later poems, it does not transpire that the poet ever brought this into a logical relation with other essentials of faith in a perfect, solid, yet flexible and animate whole of Christianity. The utterance that he so fitly assigns to Arthur falls under some suspicion of being merely "spoken in character," as one says of stage personages, though the suspicion is not quite just.

It would seem also unnecessarily harsh and unjust to cast any shadow of that kind upon the exquisite purity of the nun's devout yearning in "St. Agnes's Eve," or the strong, clean, manly virtue infused into that other vigorous monody of the "maiden knight" Sir Galahad, as he sings of his quest for the Holy Grail. Yet in some degree these are sympathetic interpretations, rather than an outgrowth of the poet's own faith. He had a pure mind, an extraordinary quickness of apprehension, a responsiveness that easily translated into verbal music his impressions of the beautiful in religion as well as in nature. And it is no fault of his that he could, by these means, depict the pagan and very human sorrows of pagan Œnone, or the sturdy and matured stoicism of Ulysses, and the

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story of Demeter, with the same strength and loveliness that he imparted to the holy nun or to Sir Galahad. Still we must, in honesty, discriminate between that which a poet believes with his whole heart and soul, and that which he accepts only in part; adapting it from the belief of others, transposing its relations to suit himself. Now Tennyson, notwithstanding all that he says about faith, long since declared that

"There lives more faith in honest doubt, Believe me, than in half the creeds."

And as Brother Azarias has pointed out, his "Ancient Sage," (published only a few years ago) gives this counsel:

"Wherefore thou be wise, Cleave ever to the sunnier side of doubt. And cling to Faith beyond the forms of Faith,"

This "faith beyond the forms of faith" is perilously like "the wise indifference of the wise" in that dedication of "Enoch Arden," which we have quoted in a previous paragraph. The wise may well be indifferent to the praise or blame of the world, but it is by no means so safe to tell a man that to be wise in religion he must hold to faith without its forms. That would mean disintegration of the man, as well as (if such a thing were possible) disintegration of the Church. Yet it would seem, on candid scrutiny, that Tennyson really did not perceive the difference between the two situations. He thought one could find an individual, independent centre in matters of faith, precisely as one can in dealing personally with the world. In this respect he reminds us of his own "Merlin and the Gleam;" the wizard Merlin following incessantly a "gleam"—that is, the truth—which is always just beyond him. Merlin, old and weary yet still pressing on after that fleeing light, says:

"I saw whenever
In passing it glanced upon
Hamlet or city,
That under the Crosses
The dead man's garden—
The mortal hillock—
Would break into blossom,"

And, when the gleam reached the land's end,-

"There on the border Of boundless ocean, All but in Heaven Hovers the Gleam."*

^{*} Demeter and other Poems, 1889.

Tennyson also sees the place and the power of the Cross in the universal scheme of things; but the actual Cross is never firmly planted in his heart, the illumination of the supernal truth is never completely present to him here, but always hovering somewhere out of reach, past the land's limit. This is made manifest once more in his "Crossing the Bar," somewhat famous as his only attempt at a hymn, and even as such, written only in response to a request.

"Sunset and evening star,
And one clear call for me!
And may there be no moaning of the bar
When I put out to sea!

Twilight and evening bell,
And after that the dark!
And may there be no sadness of farewell,
When I embark;
For tho' from out our bourne of Time and Place
The flood may bear me far,
I hope to see my Pilot face to face
When I have crost the bar,"

Here there is something almost pagan, if not quite so. "And after that the dark!" At the best it is not faith which is expressed, but only a hope, muffled by an undertone of gloom akin to despondency. How different the whole spirit from that of Cardinal Newman's "Lead, Kindly Light," which is all aglow and pulsing with buoyant faith, vigor and enthusiasm that could not die!

Finally, in the volume now before us—the wreath of poetic flowers which, we may say, his own hand wove to be laid upon his grave—we have several pieces that exemplify the Laureate's various tendencies with undiminished emphasis, and with singularly little change from the tone or direction of his earlier work. "The Death of Œnone" brings with it all the misty charm and delicate detail of his other subjects from Greek tradition, such as "Tithomus," "Demeter," and the superb "Tiresias." "St. Telemachus" renews the broken series of medallion-like pictures from Christian history. Then we have "The Church Warden and the Curate," a bit of satirical homily, grotesque in dialect, recalling the "Northern Farmer;" and, in "The Dawn," and "The Making of Man," a reminder of that life-long grappling with problems of the sensible universe which was manifested some years ago in his curious and powerful meditation entitled "Vastness." Here, too, we find:

"A voice spake out of the skies
To a just man and a wise—
'The world and all within in it
Will only last a minute!'
And a beggar began to cry
'Food, food or I die!'
Is it worth his while to eat,
Or mine to give him meat,
If the world and all within it
Were nothing the next minute?"

This, which is one of the whims or fancies of genius, makes us remember that there was a vein of simplicity in Tennyson that sometimes degenerated into silliness, as in those prosaic New Year verses of 1865-66:

"I stood on a tower in the wet,
And New Year and Old Year met,
And winds were roaring and blowing,
And I said, 'O years that meet in tears,
Have ye aught that is worth the knowing?'"

Not even a writer of genius, if he were controlled by profound and concentric principles of faith and perception, would ask such an idle question of the years, or inquire whether it were worth while for the beggar to wish to eat and the rich to give alms, at the ending of the world. The fact that Tennyson, who was a genius, saw fit to record these errant little speculations goes far toward showing that his mind was by no means firmly rooted in the depths of spiritual knowledge. Yet the frankness with which he rippled out such random notes, as they chanced to come to his lips, often lent to his love-songs, his short lyrics and bursts of sentiment a natural and spontaneous quality which was very winning, as in the fond exaggeration of that blank verse song in "The Princess:"

"O swallow, swallow, if I could follow and light Upon her lattice, I would pipe and trill, And cheep and twitter twenty million loves."

We must take him with his faults and merits, his weaknesses and his strength. Doubt may well be entertained as to whether he is strong in "Akbar's Dream," where he sets forth elaborately the endeavor made by the great Mongol emperor, Akbar, in the sixteenth century, who had been somewhat impressed by the Jesuit missionaries of the Indies, to "invent a new eclectic religion, by which he hoped to unite all creeds, castes and peoples." This religion he called "the Divine Faith," and although he partially established it in his lifetime, it crumbled away and disappeared immediately after his death, as might surely have been ex-

pected. Tennyson, however, dwells upon this theme, and appends to the poem the most minute and copious notes that he ever bestowed on any of his works; the inevitable impression being that he regretted the failure of poor Akbar's scheme, and that the idea of reconstituting such a "Divine Faith" of eclecticism at sometime in the future of mankind haunted the Laureate of England with a peculiar fascination.

But there are three poems in this latest book which are especially suggestive, interesting and instructive with regard to his attitude toward religion. These are "Faith," "God and the Universe," and "Doubt and Prayer." Their brevity admits of our quoting them here:

FAITH.

I.

Doubt no longer that the Highest is the wisest and the best, Let not all that saddens Nature blight thy hope or break thy rest; Quail not at the fiery mountain, at the shipwreck, or the rolling Thunder, or the rending earthquake, or the famine, or the pest!

П

Neither mourn if human creeds be lower than the heart's desire!

Thro' the gates that bar the distance comes a gleam of what is higher.

Wait till death has flung them open, when the man will make the Maker,

Dark no more with human hatreds in the glare of deathless fire!

This, a distinct and final declaration under the head of "faith," leaves nothing to be determined as to what the word signified for him. Here again we have the "gleam;" only a gleam, no revelation, no certainty. And of course if a mere gleam be our sole guide, then all professions of faith are nothing more than "human creeds," as he says in the previous lines,-creeds bereft of the divine, and therefore lower than "the heart's desire." For the clean in heart are blessed, and they shall see God. Even when they fail to find true faith, or to recognize God in the creed—and fancy it to be merely human—their hearts at least still seek after God. Tennyson, thus failing, makes his ultimatum in saying that we must wait till death has flung open the gates, before we can know our Maker. And it is plain from his final line, where he purposes to do away with "the glare of deathless fires," that he has so readjusted his belief as to abolish hell. With no firm or tangible clue to the Divine; with no clear sense of the Actual Presence here in the Church, and of immediate, constant and vital communion with God through it; with but a gleam for beacon, or, as he phrases it in another darksome little song,

> "the starry track Glimmering up the heights beyond me;"

and with an individual, private judgment that conveniently elimi-



nates future punishment from the scheme of things, it must be confessed that Tennyson's Christianity, if it deserved to be called such, had sadly fallen away from all firm standards. An atheist he evidently was not, nor would it be quite true or fair to call him an agnostic. At least he was not consciously one, and would probably have spurned the imputation indignantly. Yet how nearly his vagueness—that inconclusive mood which we have also noticed in his dramas—brought him to a kind of agnosticism, may be seen from the following poem in this posthumous volume:

GOD AND THE UNIVERSE.

Will my spark of being wholly vanish in your deeps and heights? Must my day be dark by reason, O ye Heavens, of your boundless nights, Rush of suns, and roll of systems, and your fiery clash of meteorites? "Spirit, nearing you dark portal at the limit of thy human state, Fear not thou the hidden purpose of that Power which alone is great, Nor the myriad world, His shadow, nor the silent Opener of the Gate."

Always generalities, paraphrases of Christian truth—a curious evasion of self-committal to the exact and unalterable points of Christian facts and doctrine—and an insensible merging of the soul in a whirl of æonian matter! So long ago as in 1869, he gave utterance to much the same feeling, in "The Higher Pantheism:"

"The sun, the moon, the stars, the seas, the hills and the plains—
Are not these, O Soul, the Vision of Him who reigns?

* * * * * * * *

Glory about thee, without thee; and thou fulfillest thy doom,
Making him broken gleams, and a stifled splendor and gloom.

* * * * * * * *

And the ear of man cannot hear, and the eye of man cannot see;
But if we could see and hear, this Vision—were it not He?"

The third of those latest significant poems to which reference has been made is a sonnet called "Doubt and Prayer," which—were it not for the disclosures made in his other pieces—we might almost suppose to have been written by a Catholic, in temptation, with his eyes fixed on the goal of final perseverance:

"Tho' Sin too oft, when smitten by Thy rod,
Rail at 'Blind Fate' with many a vain 'Alas!'
From sin thro' sorrow into Thee we pass
By that same path our true forefathers trod:
And let not reason fail me, nor the sod
Draw from my death Thy living flower and grass,
Before I learn that love, which is, and was
My Father and my Brother and my God!
Steel me with patience, soften me with gaief!
Let blow the trumpet strongly while I pray,
Till this embattled wall of unbelief
My prison—not my fortress—fall away!
Then, if Thou willest, let my day be brief,
So Thou wilt strike Thy glory thro' the day."

Assuredly an impassioned devoutness breathes through all that strain. The tone his mind could take toward an actual and undoubted Catholic was manifested some years ago in his noble memorial lines to the late W. G. Ward:

"Farewell, whose like on earth I shall not find,
Whose Faith and Work were bells of full accord,
My friend, the most unworldly of mankind,
Most generous of Ultramontanes, Ward,
How subtle at tierce and quart of mind with mind,
How loyal in the following of thy Lord!"

How strange it is that such a man, capable of this perception and of writing a sonnet like the "Doubt and Prayer," should still at the farthest confine of a long life, hover along the verge of a "higher pantheism," or agnosticism, even as in his verses "To Mary Boyle" (1889), he lagged inertly upon the threshold of truth, saying to her:

"What use to brood? This life of mingled pains
And joys, to me,
Despite of every Faith and creed remains
The mystery."

This fact counts another item in the long list of Tennysonian surprises. Are we then to say that he was inconsistent? In one sense, judging him from the highest, the Christian point of view and as a thinker-yes. But, in another sense, no; for he was at least consistent with himself as a poet, and true to his artistic ideals, so far as they went. There is in his latest writings a recrudescence of all the elements and impulses that moved within him earlier. His power of expression did not weaken; on the contrary, it was in some respects clarified, strengthened and ennobled as he grew to old age. But his attitude did not change in any essential. He increased in mental stature, but hardly in vision. The old hesitations, doubts, uncertainties of reflection that were present in "The Two Voices," and "In Memoriam"—the alternations of uneasy speculation with sudden bursts of faith and devoutness—reappear in his work to the end. He never attained to a clear solution, a perfect faith; and to some extent the din of materialism, the dizzying fumes of chemistry, the vaporous theories of modern natural science when it insists on diffusing itself far beyond the province of its facts, and even juggles with the facts themselves -all this overcame him and threw him into greater confusion, during his later years, than in the period of his prime. He turned upon himself as a lyrist, and produced dramas, but still he was the same man in his plays as in his songs and stories, and arrived at nothing more than he had reached before. He supplemented the

youthful idealistic and republican enthusiasm of "Locksley Hall," with a conservative criticism and rebuke in "Locksley Hall Sixty Years After."

Yet the idealism of the later "Locksley Hall" was the same as that of the first, only he approached his theme from the opposite pole of social experience, and admonished the young generation now, as he had formerly castigated the old, winding up with a courageous cry:

"Follow you the star that lights a desert pathway, yours or mine.

Forward, till you see the highest human nature is divine.

Follow the Light, and do the Right—for man can half control his doom—

Till you find the deathless Angel seated in the vacant tomb."

That is all very well in a way, though as to the divinity of human nature, decidedly latitudinarian, Unitarian or Universalist;—at any rate something which is not purely Christian. And why should he here harp again on man's "doom" (as also in "The Higher Pantheism"), instead of turning to his salvation? The course of his thought is the same all the way through: it turns upon self, upon man in a groping state and upon his own unaided human power of finding an outlet through darkness—for what? Only to encounter and be merged in another obscurity, beyond this mundane existence:

"Twilight and evening bell And after that the dark!"—

with some expectation of meeting the Pilot then, though we cannot meet Him now. A sad and strange, procrastinating philosophy, tinged with a strong desire to make itself Christian!

The death of Tennyson has been publicly described and much written about as a most "gloriously beautiful" one. But so far as we can gather from all accounts and laudations of it, the death-scene was beautiful only in a picturesque, earthly way. The calm serenity, the last conscious action of calling for a copy of Shakespeare's "Cymbeline," which the poet opened at an appropriate page containing the dirge; the flooding moonlight; the autumn leaves and flowers strewn over his mute body the next day;—the utter absence of any profession of faith, or sacrament, or even symbol of Christianity;—all this was entirely suitable to the last hours and death of a virtuous pagan. But, if regarded as the surrounding to the death of a poet supposed to be Christian, it was unfit, cold, and desolate; not beautiful.

Tennyson's single-minded conscientiousness in his art, his fidelity to the best that was in him poetically, give him a great value to readers of literature and lovers of that which is beautiful in it. Nothing like justice has been done by the world in general to the abundance, the merit and the variety of his productions during the declining decades of his wonderful career; the grace and sweetness of his nature-studies, the vigor and spirit of his martial or naval ballads, the force and inventiveness of his half-lyrical tales in verse, full of character-suggestion and the play of passion. Upon these it was our intention to dwell more at length in this article, but the limitations of space will not permit us to do so. A large proportion of that which he has left us will remain a source of delight and a subject of interesting study for a long time to come. But we cannot read or study him with genuine profit unless we realize the curious paradox embodied in his life and works.

This paradox is as follows: People accused him of inconsistency in his poetic career, and even derided him for it. But, as a matter of fact, he was entirely consistent poetically, to even an exceptional degree—remaining the same at last as he was at the beginning—a truth which we have tried to make clear in this brief review. On the other hand, great numbers of people and critics (supposing these to be two separate and alien bodies) have praised him unstintedly for consistency in Christianity, and this—as we think the extracts we have cited sufficiently prove—is precisely where he was *inconsistent*; since, being so largely imbued with the thought, the feeling and conviction of a Christian, he missed becoming wholly one, and drifted toward the vagueness of an eclectic and agnostic religion.

He appears to have become spell-bound by the magic of his own power over language, color, imagery and to have been held there helpless in a land of poetic enchantment which, to the last, prevented him from grasping the supreme reality that he perceived ahead of him as an unattainable, distant light. In reading Tennyson, therefore, it is well to guard against being veiled and fettered by the same impalpable yet clinging mist of soft, meditative, poetic loveliness, which gradually blurs and blots the clear outlines of things, then confuses the traveller's eye and brain, and finally overpowers him with drowsy and moveless languor.

GEORGE PARSONS LATHROP.

MEDIÆVAL UNIVERSITY LIFE.

- Die Entstehung der Universitäten des Mittelalters bis 1400. Von P. Heinrich Denisse, aus dem Predigerorden, Unterarchivar des Hl. Stuhles. Berlin. 1885.
- 2. De l'Organisation de l'Enseignement dans l'Université de Paris au Moyen Age. Par Charles Thurot. Paris. 1850.
- 3. Essai sur l'Organisation des Etudes dans l'Ordre des Frères Prêcheurs au XIIIème et au XIVème Siècle (1216-1342). Par G. Douais. Paris. 1884.
- Monumenta Franciscana. 2 vols. Rolls Series. Vol. i. edited by J. S. Brewer, London, 1858; vol. ii. edited by Richard Howlett, 1882.

RATHER Denifle's book on the origins of the universities is epoch-making. The learned Dominican, as sub-archivist of the Vatican library, has utilized to their full extent the rare and exceptional advantages at his disposal. To the extensive materials that lay at his hand he brought to bear vast learning and marvelous patience. No document seems to have escaped him; he allows nothing in the document that he handles to pass unchallenged. He has an eye for the most minute details. Indeed, it is in grasping the whole meaning of a phrase or sentence that he has been enabled to correct so many illusions in which the historians of all our universities have been living. His method is purely analytical. He leaves very little to inference. He makes no statement that is not based on a document, or that is not backed up by ample proof. His familiarity with the literature of the subject of universities in all its details enables him to go behind the polish of the sentence and lay finger upon the very text that the author had in mind when stating his propositions. He forthwith discusses and settles the authoritative value of the work drawn from. This is the perfection of critical acumen. And inasmuch as our historians of universities have been living in a fool's paradise concerning the origin and formation of those institutions. Father Denisle has his hands full in correcting, refuting, rejecting, and discussing the statements of his predecessors. book in every page bristles with argument. It is a book that shall henceforth be indispensable to the student of history. No man can ignore it and presume to write upon mediæval times. The three agencies that moulded the Middle Ages into their characteristic shape and gave them life and being were the Papacy, the

Holy Roman Empire, and the University of Paris. Each wielded a far-reaching influence the full extent of which few historians have been able to measure. Therefore do we most cordially thank Father Denifle for the scholarly volume he has given us, and we hope and pray that he be spared the health and strength to finish the other volumes that are to follow.

Prior to Father Denisle's great book the only work that attempted to remove the history of the University of Paris out of the domain of romance in which DuBoulay had placed it was the slender volume of M. Charles Thurot. Every student of education since 1850 has found the book invaluable in giving him for the first time a correct notion of the organization of the Univer-Even the search-light of Father Denisle's acumen, while pointing out a mistake here and there, approves of the main conclusions of the author. When Thurot went astray he was generally misled by placing too great confidence in DuBoulay. M. l'Abbé Douais did for the Dominicans what Thurot did for the University of Paris. He for the first time mapped out for the general reader the whole complex organization of study under which the Dominicans passed. His book is a valuable contribution to the history of pedagogics. It is largely based upon original documents. The book is timely, for men are now beginning to appreciate the influence of the mendicant orders upon the Middle Ages. In like manner, the "Monumenta Franciscana" gives us insight into the foundations of the Franciscans in London and Oxford. The first volume includes the chronicle of Thomas Eccleston, the letters of Adam Marsh, and a short register of the Minorites in London. The second volume contains a fragment of Thomas Eccleston's treatise on the advent of the friars, the rule of St. Francis, the statutes of the observant Franciscans and other valuable records bearing upon the order. Noteworthy is the respectful tone in which the introductions to these volumes are written by the late Professor Brewer and Mr. Richard Howlett. These writers were not Catholic, but no Catholic could be more zealous in defending the practises and customs of the friars; none could be more considerate in making allowance for time and place.

Father Denisle is outspoken in his denunciation of the synthetic method as applied to history. He must be analytical or nothing. He is convinced that naught but unsatisfactory results can be reached by the synthetic method. But we should distinguish. For purposes of investigation and verification, the analytical is the only proper method; but results having been reached, there is always place for the synthetic method. The material having been

¹ Einleitung, xxiii.

tested, it may be safely employed to build up with. Therefore, under leave of Father Denifle, we shall make a short study of school-life in the mediæval universities, in the course of which we shall attempt to reconstruct that life as contemporaries reveal it, and as it appears to our view. We shall first consider the organization of a university.

Ī.

The oldest mediæval universities of which we have cognizance are those of Paris and Bologna. The origin of each is buried in the mists of the past. Bologna became famous as a school of law; students flocked thither from all parts; in the course of time it possessed an autonomy of its own. Pope and emperor endowed it with certain rights and privileges, and forthwith it loomed before us as a great university. So it was with the university of Paris. For half a century before it became recognized as such, we find it to have been a great intellectual centre, made famous by the brilliant teachings of William of Champeaux, Abelard and Peter Lombard. The masters became organized into a scholastic guild. But the university can be traced to no one school, or no combination of schools as its source.\(^1\) The teachers of that day supplied an educational want: the schools of Paris thus became centres of instruction which grew apace with the concourse of students and teachers. "They had practical ends," says Laurie; "their aim was to minister to the immediate needs of society. They simply aimed at critically expounding recognized authorities in the interest of social wants. It was the needs of the human body which originated Salerno, it was the needs of men as related to each other in a civil organism which originated Bologna; it was the eternal needs of the human spirit in its relation to the unseen that originated Paris. We may say, then, that it was the improvement of the profession of medicine, law and theology which led to the inception and organization of the first great schools." To the inception, perhaps, yes; to the organization, decidedly no. The university of Paris was not organized from the schools of St. Victor's, or St. Genevieve's, or any combination of these with other schools. There is extant no record of a definite act by which one might say, "Here is the charter of incorporation; here is the decree of organization." The guild spirit was abroad and permeated all trades and professions. The masters were no exception. When their guild looms into prominence, it receives recognition: but it is only by decree of pope or emperor—and of pope chiefly that its degrees become entitled to universal respect. Thus, long

¹ This point has been settled forever by F. Denisse, Entstehung der Universitäten, pp. 655 sqq.

² Rise and Constitution of Universities, pp. 109, 110.

after the guild of masters in Paris had become recognized, it remained under the jurisdiction of the chancellor of the cathedral of Notre Dame. It was out of the struggle between the chancellor and the masters that the university grew into a corporate existence.

The chancellor of Notre Dame had been an important factor in educational matters up to the beginning of the twelfth century. He held absolute sway over the students of all Paris; he dispensed licenses; he was the students' civil and religious judge; he had the power of excommunication.1 He became high-handed and abused his power. He exacted exorbitant fines; he had a dungeon of his own, and imprisoned arbitrarily. The popes and their legates, in order to diminish this power, granted various privileges to students and masters. Thus Innocent III., who had been himself a student in Paris, and had been witness of the chancellor's tyranny and of the long train of evils that followed in its wake, legislated in order to break it down. In 1208 he authorized the teachers to be represented by a syndic; in 1200 he bestowed upon them the right to take oath to observe such rules as they deemed proper and useful to impose upon themselves as a body. In 1213, he restricted the chancellor's judicial powers by forbidding him to refuse a license to teach, to anybody recommended by the masters. This act is regarded as the charter of the university.3 In this manner did His Holiness constitute masters and students into a true corporation. Six years later-in 1219-Pope Honorius III., forbade the chancellor to excommunicate masters and students in a body without the authorization of the Holy See.³ The kings of France was no less generous in the privileges and prerogatives that they granted the masters and students of Paris. All this legislation fostered the growth of the university while it crippled the authority of the chancellor. But the death-blow was given to that authority when the masters and students abandoned the shadow of the cathedral and flocking to the left bank of the Seine, found refuge in the dependencies of the abbeys of St. Genevieve and St. Victor. In 1213 no school belonging to the university stood outside the island of the city. In 1215, the papal legate, Robert de Courcon regulated in regard to the study of theology that no one should teach it who was not thirty-five years old, who had not devoted at least eight years to study in the schools, and who had not in addition attended a theological course of five years. This shows that Paris had already a

¹ Bulæus, Hist. Univ. Paris., vol. iii., p. 44.

² Thurot, De l'Organisation de l'Université, p. 12.

Not any member of the university, as Thurot puts it.—De l'Organisation, p. 12.

⁴ Denisse, Die Entstehung der Universitäten, p. 662.

Bulæus, vol. i., p. 82. Thurot mistook the reading of this text in his essay.

school of theology and that dialectics were regarded as simply a preparation for the higher branch. In 1216, the first year of the papacy of Honorius III., who took an abiding interest in the rising university, a school was opened under the jurisdiction of the chancellor of St. Genevieve's. The chancellor of the cathedral regarded this as an encroachment upon his rights, and refused to regard as valid any license or diploma signed by the chancellor of St. Genevieve's. The quarrel was settled by Pope Honorius III., in a brief to the bishop and chancellor of Paris, in which it was ordered that any licentiate of the chancellor of St. Genevieve's be admitted to teach upon the same footing with a licentiate of the chancellor of Notre Dame. This gave new impetus to the schools on the left bank of the Seine. Students continued to flock thither. Between 1210 and 1222 the largest exodus to Mount St. Genevieve took place. About 1227 the schools of theology and law were transferred to the same side. Thenceforth the abbot of St. Genevieve's assumed a certain amount of jurisdiction over the university, and finally the chancellor of St. Genevieve's shared the administration with the chancellor of Notre Dame and the rec-Thus was the University of Paris--the tor of the four nations. Latin Quarter-cradled on the island beneath the shadow of Notre Dame. Thus did it grow into a corporate existence out of the struggles of the masters to rid themselves of the thralldom of the chancellor.

Once only did the papacy fail in sustaining the university in this struggle. The incident will throw light upon mediæval university life. About 1221 the university had a seal engraved as the essential attribute of its corporate autonomy. The chapter of Notre Dame took umbrage at this act as a novelty not to be tolerated and brought the case before the papal legate then residing in Paris. The legate placed an injunction upon any further use of the seal until the case should have been properly tried and decided. Before the decision was arrived at, the seal was used, and in 1225 the legate decided in favor of the chapter of Notre Dame, broke the seal and forbade, under penalty of excommunication, the formation This decision raised a storm. The scholars and masof another. ters rose up as one body; they besieged the house in which the legate dwelt, and caused him to flee to some place of safety. It was only in 1246 that the university afterwards obtained from Pope Innocent IV. the right of holding and using a seal. In the meantime the four nations had each its seal, and any document requiring the sanction of the whole university was stamped with the four seals conjointly. While examining these seals in the beautiful volume of Vallet de Viriville we are reminded that the patrons of the university were the Blessed Virgin, St. Catherine, St. Nicholas and St. Andrew.¹

Speaking of the four nations reminds us of the fact that they, no more than the pre-existent schools, were the elements out of which the university was directly formed. They came after that formation. The university grew simply out of the association of the professors of the four disciplines: theology, law, medicine and arts.2 The four nations were so many guilds modelled after the Saxon guilds of an earlier age, The division was more artificial than spontaneous. It grew out of the peculiar relation of things in the Middle Ages. Youths flocking to a centre of learning from all parts of the world found themselves among strangers, exposed to every kind of imposition. Until it was otherwise legislated for and even thereafter these youths were charged exorbitant prices for lodging, board, books, service, clothing. True, the university from the hour of its inception undertook to protect the students against the exactions of the townspeople. Thus, the price of lodgings was to be fixed by sworn arbitrators, half appointed by the town and half by the city; but there were many other things in regard to which the students required protection, and of which the university could not or would not take cognizance. Hence the necessity of their forming themselves into associations for mutual protection. The natural division was according to nations and provinces. Oxford had two nations, the North and the South; the students of Bologna were divided into Transalpine and Cisalpine; those of Paris were divided into four nations. The last-named were organized somewhere about 1219. They were composed of all the scholars included in the licentiate, together with the Masters of Arts.4 The four nations were known as the French, which included the Italian, Spanish and Greek students; the Picardians, which included the students of the northeast and the Netherlands; the Normans and the English, which included those of Ireland. Scotland and Germany. Later on, we find the Franciscan students in the university so numerous that for convenience sake they were divided into nations. Such a division was well calculated to bring about a simplification of general management and superintendence. Each of the four nations had its own hall and its own rights and privileges as a corporate body. It had its procurator, and, as has already been remarked, its seal distinct from that of the university, its common purse, its patron saint and its Masses.⁵

¹ See the images of those saints on the first seals in Histoire de l'Instruction Publique en Europe, pp. 129-135.

² Denifle, Entstehung, p. 131.

⁸ Story of the University of Edinburgh, by Sir A. Grant, i., p. 5. Gregory IX. obtained this concession from Louis IX. in 1244.

⁴ Deniffe, Entstehung, p. 131.

⁵ Thurot: De l'Organisation de l'Enseignement, p. 22,

Members were addressed according to the nation under which they were enrolled. Those of the French nation as Honoranda Natio Franciæ, Gallorum or Gallicana; those of Picardy as Fidelissima Picardorum, or Picardica: those of Normandy as Veneranda Normanorum or Normaniæ; and those of Germany as Constantissima Germanorum, or Allemaniæ Natio.1 In consequence of the wars between England and France antipathy to England was shown at an early stage of the university by expunging that name and substituting Germany instead. The national spirit waxed strong with the growth of each organization. Party spirit ran high among the nations. Public festivities were frequently occasions for public rioting. Each nation vied with the other in celebrating the feast day of its patron saints, with the religious solemnities of which were mixed up the most worldly and profane rejoicings. They were made the occasion of illuminations, masquerading, balls and cavalcades. As each nation sought to excel in display, members of the other nations endeavored to spoil the celebration. were attacked while walking in procession. A decree of Oxford University prohibited the nations from going to church or to the public places in a body, dancing or shouting with masks over their faces, or to march anywhere with garlands of leaves or flowers on their heads under penalty of excommunication, and if persisted in, of imprisonment.2 Not only did each nation seek to rival the others in pomp and show, but each to a certain degree despised the others, and attacked thereto a nickname of opprobrium that was considered characteristic. The Englishman was a drunkard and a leech; the Frenchman was proud, effeminate and decked out like a woman; the German, furious and obscene; the Norman, vain and boastful; the Poitevin a traitor and a spendthrift; the Burgundian, stupid and brutal; the Breton, light and changing; the Lombard, miserly, cowardly and avaricious; the Roman, seditious, violent, and quick at blows; the Sicilian, cruel and tyranical; the Brabantine, a man of blood, an incendiary, a brigand; the Fleming, a glutton, a prodigal, and soft as butter.³ The hurling of such epithets soon led to blows. Even the religious orders became tainted with the race-spirit. We read that the superior of the Dominicans in Oxford objected to the receiving of subjects from other nations in the convent of that place, for which he was deposed in general chapter and subjected to a severe penance for several years.4

¹ Vallet de Viriville: Histoire de l'Instruction Publique en Europe, p. 134.

² Munimenta Academica, p. 18.

³ Jacques de Vitry: Historia Occidentalis, cap. vii., p. 278. Archbishop Vaughan erroneously mentions the Picards in this quotation. Jacques de Vitry does not use the word.
⁴ Martene and Durand: The:aurus Anecd., t. iv., 1730, 1731.

There was one common enemy in relation to whom all the nations in all the universities were united as one man. enemy was the town. The students were so protected by papal and royal decrees that they could behave most outrageously with the greatest impunity and escape chastisement. The university became the spoiled child of kings and popes. The young men had no respect for person or property. They compelled the passers-by to give up their purses and spent the booty so acquired in the taverns with the vilest company of men and women. No townsman or townswoman was safe in their hands. No matter how great their crime, if taken into custody by the civil authorities the whole university was up in arms and suspended all lessons till the culprits were released.1 There was never a peace between town and gown; there was merely an armistice; the feud was only smouldering when it was not open. Affrays not infrequently ended in the plundering of houses and even in murder. A characteristic incident that occurred in 1381 in Cambridge when the country was in a state of intense excitement, is told by Mr. J. Bass Mullinger: "At Corpus Christi all the books, charters and writings belonging to the society were destroyed. At St. Mary's. the university chest was broken open, and the documents which it contained met with a similar fate. The masters and scholars. under intimidation, surrendered all their charters, muniments and ordinances, and a grand conflagration ensued in the market-place, where an ancient beldame was to be seen scattering the ashes in the air, as she exclaimed, 'Thus perish the skill of the clerks!'"2 These instances might be multiplied at will.

The nations soon grew beyond the mere purposes of discipline that seemed to have been the primary object of their formation. The prominence that they acquired in avenging injuries done any member of their guild, whether by legal process or otherwise, gave them a voice in the administration of the university. Their proctors were received with the dignity and honor becoming representatives of bodies so powerful. They elected officers; they prescribed studies; they were foremost in repelling every attack made upon the rights and privileges of the university by chancellor or bishop. They elected a common head who became known as the rector. In 1249 they agreed that this election shall be by means of the four proctors. The rector was taken exclusively from the faculty of arts. At first elected for a month, afterwards for six weeks, he was by statute of 1278 elected for three months.

¹ For instances see Du Boulay, Hist. Univ. Paris, t. v., pp. 97, 145, 830; t. vi., p. 400.

² History of the University of Cambridge, "Epochs of Church History," p. 20.

³ Bulæus, Hist. Univ. Paris, vol. iii., p. 222.

In the beginning he was only the common head of the nations. Deniste says: "If the rector was only head of the nations, and these were not identical with the university, it is self-evident that the rector was not head of the university." As we have seen, the nations soon became the most formidable, the most active and the most aggressive elements in the university. Towards 1300 the faculties of law and medicine were subject to the rector of the four nations; towards 1350 the faculty of theology fell under his jurisdiction, and he then became head of the whole university.2 Father Deniste considers the office to have been a superfluous one throughout the whole career of the university.8 Be this as it may, the day of his installation was one of great rejoicing. It was celebrated by a solemn procession in which the religious orders residing in the Latin quarter joined the members of the university. His jurisdiction was supreme, extending to all schools, officers and trades under the university. He was held in great honor and esteem; was frequently called into the councils of the king, and in procession walked side by side with the bishop of Paris as his peer. He was custodian of the treasury and the archives, and controlled the Près-aux-clercs. He gave letters of scholarship to masters and students, conferred on them the privileges of the gown, and received from them in return the oath of perpetual obedience, no matter the dignity to which they might afterwards arrive. He was addressed in French as Messire, or l'Amplissime; in Latin as Amplissime Rector, or Vestra Amplitudo.5

The revenue of the rector came out of the sale of parchment, which was controlled by the university. The market was permitted only in three places; namely, in a hall of the convent of the Mathurins, at the fair of St. Laurent and at that of St. Denis. The rector sent out his four sworn dealers in parchment to count and tax the bundles brought in for sale by the outside merchants. The tax being levied and gathered, after the tradesmen by appointment of the king, those of the bishops and the masters and scholars had made their purchases, the merchants were free to sell to whom they would.⁶ In 1292 there were nineteen dealers in parchment in Paris, twelve of whom lived on the street then known as des Écrivains, now called de la Parchemnerie.⁷

The great event in this connection was the fair held at St. Denis. From 1109 it was customary for the people headed by the bishop and many of the clergy of Paris, to go in procession to the open plain of St. Denis in order to venerate a portion of the true Cross.

¹ Entstehung, p. 107. ² Denisse, ibid., p. 132. ³ Ibid., p. 693.

⁴ Vallet de Viriville, Histoire de l'Instruction publique en Europe, p. 125.

⁵ Ibid., p. 134. Crevier, Histoire de l' Université, t. ii., p. 130.

⁷ A. Franklin, La Vie privée d'Autrefois, Ecoles et Colleges, p. 94.

The relic was exposed, prayers were said, sermons were preached and solemn benediction was given. The exposition of the Holy Cross lasted nine days during which these devotions were repeated. Merchants took occasion of the throngs to expose their wares, and the plain of St. Denis during this season became also a place of chaffer—a fair—indictum.1 As late as 1420 the religious character was still kept up, for we find that June 8th of that year the bishop and clergy went to St. Denis in order to preach a sermon and give benediction of the Holy Cross.² Early in the thirteenth century St. Denis became the chief market for parchments. The rector of the university recognized it as such, and rode in state to the fair, and had his seal impressed upon all the parchments required during the year.3 It was the occasion of a general holiday for the university. The students started from St. Genevieve's, and rode in procession to the grounds amid the astonishment of the townsfolk. No sooner had they set foot on the ground than they abandoned themselves to all kinds of disorder. It was a pilgrimage of voluptuousness in which innumerable excesses were committed.4 In following the doings of the rector we are getting a further glimpse of mediæval university life. His was a unique position in that life. To attain the goal of his ambition, his nation —and every nation had its own candidate—set on foot intrigues in which they exhausted their ingenuity; there was rivalry open and secret; there were bribings and threatenings; masters and scholars became excited; violence and quarrelling were frequent, ending sometimes in murder.6 Disorder and turmoil preceded the attaining of the office; Disorder and turmoil accompanied the celebrations connected with the holding of the office; disorder and turmoil succeeded to the going out of office. This excitementthis constant seething of brain and vibration of nerve-enters into the very life of the university.

It was out of all this turmoil that the university grew into life and being under the fostering care of Church and State. The privileges that both Church and State conceded were the vital principle of her existence. "A university without privileges," says Du Boulay, "is a body without a soul." Looking back upon her growth, we find her cradled in the sanctuary of Notre Dame, then nourished into full development as an organism, independent of the state, with her own autonomy and with power to make her own laws.

¹ Whence l'endit-lendit-Landit.

² Le Beuf, Histoire du Diocese de Paris, t. iii., p. 283.

³ Le Beuf, ibid., p. 269.

⁴ Vallet de Viriville, *loc. cit.*, p. 172. A full description—a description that we dare not reproduce—written between 1290 and 1300, has been published in the valuable work of Le Beuf, *Histoire du Diocese de Paris*, p. 259.

Thurot, De l'Organisation, p. 32. Hist. Univ. Paris., vol. i., p. 95.

She drew her vitality from the Holy See. The same is true of Oxford and Cambridge. It is amusing to note how jealously Oxford watched Paris. Whatever privilege Paris received, Oxford claimed as being on a par with her sister Studium. Nay, if some of the doctors in Paris were given a benefice or made bishops, forthwith Oxford sent a deputation to Rome asking for an equal share in the bounty of the Holy See. As science is free as truth, even so were these mediæval universities secure from all control. This complete liberty was the secret of their success. Scholars and masters enjoyed immunity from civil jurisdiction, and were answerable for their behavior only to fellow-members. In this respect, the University of Paris stood alone, a power great and unique in the world, ranking in prestige and influence with the Papacy and the Holy Roman Empire. Doctrinal heresies lurked and grew within the precincts of this and other universities; immorality was at times rampant among students and professors, but withal, as children of the Church, encouraged and protected by the popes, they were Catholic in their spirit and in the general tone of their teachings. " Privileged and well-beloved daughters of the Church," says Wimpheling, "they endeavored by their fidelity and attachment to render to their mother all that they owed her." So long as they remained docile to the Church they flourished; the moment they were secularized and became mere tools in the hands of unscrupulous governments, they fell from their high and exceptional standing. This is their history in a nutshell.

II.

Such was the outward showing of a mediæval university as witnessed in its highest type. Its inner life was more varied and interesting. Let us again confine ourselves to Paris or to its models. The University of Paris was an intellectual centre through which passed numerous currents of humanity from every part of Christendom,—all devoured by a thirst for knowledge that could scarcely be satisfied. There was scarcely a class or condition of men that was not to be found in a mediæval university. The rich were there, and in their eagerness to acquire knowledge forgot that they were rich, and neglected to surround themselves with the luxuries and comforts that wealth might have purchased. The poor were there, and were not ashamed of their poverty. Prince and peasant, lordly cardinal and struggling clerk, sat on the same floor listening to the same lecture. Boys of twelve were there; a statute had to be passed excluding those under that age. Men of thirty were there; "at the age of thirty or forty," says Le Clerc, "the student

¹ De Arte Impressorio, p. 19.

at the university was still a scholar." Professors in one department of letters were to be seen, after delivering their own lectures, seated in the same hall with their pupils studying the same matter. "This gave to the professorship," says Janssen, "a lively, animated and youthful emulation; to the student a dignity and an influence, traces of which we meet with everywhere in the constitutions of the universities."

Before assisting at a lesson, let us acquire some idea of the attainments of scholars and masters. Students began the university course at an early age. Having learned reading, writing and the elements of Latin grammar, they started to study logic at the age of twelve, and from fourteen upward they were in position to submit to the examinations and carry on the disputations that were requisite before receiving any academic distinction. The first was that of determinant. In order to receive the distinction of determinant, the student, after his second year's course, applied for examination. This examination was severe. Immediately before Christmas, the candidate sustained, in presence of the school, an argument or dispute on some question of morals against a regent. Finally, there was the crowning test, in which he disputed daily, till the end of Lent, in the school of his nation, rue de Fouriere. Remember that these disputes were carried on by boys not older than fifteen or sixteen years. In 1472 the Lenten disputes were suppressed, and the degree of bachelor was substituted for that of determinant. If successful, the candidate received a certificate showing that he had read the following works:

- 1. The Introduction of Porphyry in the translation of Boëthius. Porphyry wrote the book as an introduction to the Categories of Aristotle, a work also translated by Boëthius. It was through this book that the question of Nominalism and Realism assumed such vast proportions during the Middle Ages.
 - 2. The Categories of Aristotle.
- 3. The book on *Interpretation*, which was the only part of Aristotle's writings taught before the ninth century in the translation of Boethius. It is generally known under its Greek title *Perthermenias*.
- 4. The Syntax of Priscian. This contained books xvii. and xviii. of Priscian's Grammar, and was known as the Priscianus Minor. Priscian (flor. 500) was the standard grammarian of the Middle Ages.
- 5. An ordinary or an extraordinary course in the *Topics* and *Elenchi* of Aristotle. These books had been translated by James of Venice before 1128.3
- 6. The determinant should, in addition, have followed during two years the course in dogmatics, and should have assisted at, and taken part in, the disputations.

The course here given is of the thirteenth century. In the fif teenth century there was a general revolt against the scholastic system, and morals and rhetoric received a more prominent place.



¹ Hist. Litt, de la France au XIVème Siècle, i., p. 269, ² Geschichte, i., p. 74.

⁸ A.n. Jourdain, Recherches Critiques sur les Traductions d'Aristote, p. 58.

In 1452 the rules of versification were made a recognized part of the course, and in 1457 the study of Greek was added. But, looking at the programme of studies here laid down, it must be said that it was heavy work for youths not older than fifteen or sixteen. It may seem strange to us that boys of that age could carry on such disputes. The precociousness of the youth of those days is a fact that has been frequently commented upon. called attention to it, and Janssen gives several instances in the fifteenth century, in which extraordinary things are told of studious youths. Adam Potken (1490) read the "Euclid of Virgil and the Orations of Cicero" to pupils ranging from eleven to twelve years of age. John Eck (b. 1486) completed all the Latin classics from his ninth to his twelfth year. At the age of thirteen he entered Heidelberg, and at fifteen received from Tübingen the degree of Master of Arts. John Muller, the celebrated mathematician, matriculated in the university of Leipzig at the age of twelve, and in his sixteenth year, received his Master's degree from the university of Vienna.1 Multiplicity of subjects and multiplicity of textbooks tend to weaken the intellectual grasp of the modern student. In those mediæval days, when the student had few notes and less books to fall back upon, having listened to his lessons attentively and retained them carefully in memory, he became more selfreliant and if possessed of a fair share of talent, could hold his own in disputation.

The determinant had certain privileges and certain duties. was entitled to wear a cape and to assist at the masses of the nations. Every Friday he was obliged to discuss grammar with the backward boys. He was liable to be called upon as assistant teacher and give special or cursory lessons. This led to abuse; for we find from the statutes of Oxford that determinants, upon receipt of a bribe, were given to neglect the ordinary lessons and devote themselves exclusively to the cursory lessons. He furthermore presided over the disputations of the younger students, reviewed the whole question under discussion, noticed the imperfections or fallacies in the arguments advanced, and then pronounced his decisions or determinations in the scholastic forms.2 His duty at other times was to dispute logic daily, except Friday, when he disputed grammar, and the first and last day of his determination when he disputed questions in morals and dogma. The hours for determining were from q to 12 and from 1 to 5.3 In the meantime, after the first principal test, the determinant continued his studies till he had completed his twenty-first year, when he was

¹ Janssen, Geschichte, pp. 59, 60.

² Anstey, Munimenta Academica, i. p. 87.

³ Ibid., p. 246.

of age to become a licentiate, or one having the inherent right to teach. He should also have made public reading in some school, of a book of Aristotle during a whole year.

For the grand act of inception there was long and severe preparation on the part of the intellectual athlete, and when the event arrived it was accompanied by great excitement and turbulence. The ceremony was held in the hall of the nation under which the aspirant was ranked. The aspirant went from school to school inviting each master in person.1 Invitations of most elaborate designs were sent out to distinguished persons, and were frequently accepted. Charles VIII. of France was present in 1485 at the sustaining of a thesis. It was the ambition of every bachelor and his friends to have a brilliant gathering, and they resorted to every means to attain their object. This ambition went to the extent of making it customary to drag in every passer-by, will-he, nill-he, in order to have a large audience. Statutes were enacted forbidding the practice under pain of excommunication and imprisonment.2 The mode of disputation did not vary. The theses had been announced some time before. The conclusions were beautifully inscribed on the invitations that had been sent out. The hour having arrived, let us enter the hall. The master is seated upon a platform in a large arm-chair. The candidate for inception stands before him. The first thesis is announced, the young bachelor repeats the proposition, divides it up into its various headings and explains each as best he can. It is not permitted to interrupt him according to the statutes; but on this point the statutes are frequently broken. He is not long speaking when an opponent undertakes to pick flaws in his arguments, formulating all his objections in the mould of the syllogism. The defendant takes up the objections, resolves them into their component parts, discusses separately their affirmative and their negative sense, throws his arguments into the syllogistic form, now distinguishing in regard to the use of terms, now denying the major or minor premiss, now calling attention to the employment of an undistributed middle term. As the debate grows warm the dialectic skill and acumen of each shine forth. The opponent takes hold of the last distinction made by the defensor, and actually places him upon the horns of a dilemma. The audience cheers. The defensor is staggered; only for a moment, however. He retorts the dilemma upon his wily objector and routs him amid the clamor of the students. Another takes up the cudgels and attacks the thesis from his point Again, there are distinctions and syllogisms and dilemmas as before. And so, "amid loud clamor on the part of the



¹ Ibid., p. 433. ² Vallet de Viriville, Hist. de l' Education Publique, p. 137.

audience, and on the part of the combatants great shaking of the head and stamping of the feet, and extending of the fingers, and waving of the hands, and contortions of the body as though they were crazed," the work goes on for hours, during whole days and even weeks. Be it remembered that a written essay or thesis was in those days something unknown among students. Everything was carried on orally. At last, after a severe struggle, the successful bachelor becomes an inceptor. Here, by the way, is the origin of our word "commencement" as applied to the closing exercises of a college.

The disputation concluded, the newly-made inceptor takes oath to observe the statutes and also that he is provided with a school in which to read.3 Forthwith the biretta is placed on his head and he gives his inaugural lecture. If it is a candidate who incepts as a master in grammar, the beadle presents him with a birch and a ferule, with which he publicly flogs a boy within the precinct of the school. He pays the beadle for providing the birch and the boy for submitting to the flogging.4 Then comes the feasting incident to inception, from which none are exempt. Even members of religious orders are obliged to give in money the average cost of a banquet. The officers and the invited guests are arranged in order of precedence by the chancellor, or rector, or proctor of the nation. Presents consisting usually of silk or kid gloves, or of a scarlet hood were made to the officers and the distinguished guests. The statutes of Oxford decreed that on account of the violence and disorderly scenes that accompanied this banquet, no one should stop the free ingress and egress of any master or his servants to or from the hall or tent or other place in which the graduating feast is held, and that no one except the servants of the university, or the host, shall enter the said hall or tent until the masters who have been invited shall enter with their servants, and after they shall have sat down, no one else shall sit down except by the appointment of the chancellor, and each in proper order according to his rank; and furthermore it is decreed that no one shall beat the doors, tables, or roof, or throw stones or other missiles so as to disturb the guests, under penalty of imprisonment, excommunication and a fine of twelve pence.⁵ So great became the abuse, that ultimately all these costly rejoicings were abolished.

The inceptor's next step was to apply for the master's degree. This was done as follows: Upon application the inceptor received

¹ Peter Cantor, Verbum Abbreviatum, cap. v. p. 34.

² Thurot, De l' Organ, de l' Université, p. 88.

⁸ Mun. Acad., p. 414.

See Mullinger: History of the University of Cambridge, i., p. 344

⁵ Munimenta Acacemica, i., pp. 308, 309.

from the chancellor a book on which he was to be interrogated. After mastering the volume he returned to obtain a day in which he might present himself for examination. Upon the day named he appeared before a jury of several masters presided over by the chancellor, and after a searching examination he was declared admitted to the honor sought, or was postponed for another year. Furnished with ecclesiastical approbation, he came before the members of his faculty and received at their hands the master's cap. Once made master, the inceptor was required to teach while pursuing his own studies in theology, in medicine, or in civil or canon law. "The fact," says Mr. J. Bass Mullinger, "that each master of arts, in turn was called upon to take part in the work of instruction is one of the most notable features in the mediæval universi-His remuneration was limited to the fees paid by the scholars who formed his auditory to the bedells, and was often consequently extremely small. When once, however, he had discharged this function, he became competent to lecture in any faculty to which he might turn his attention, and when studying either the civil or canon law, theology or medicine, might be a lecturer on subjects included in his own course." Here we leave the master teaching philosophy and pursuing his studies in the professional courses, in order to consider another element that enters into the formation of the university, and though the cooperation of that element was never cordially welcomed, it none the less contributed largely to the university's development and prestige.

III.

Two religious orders that had sprung into existence about the same time with the universities, soon became identified with them and exercised over them a deep and an abiding influence. These were the Franciscans and the Dominicans. Erase from the records of both Paris and Oxford the names of the learned men furnished by these orders, and you extinguish the greatest lights, the most dazzling glories, of mediæval thought. There is a void that nothing can supply. Had these men not lived and labored as they did, the whole trend of modern thought would run differently. The Dominicans were the first religious order admitted to membership in the university of Paris, and with time became the leaders of thought. The Franciscans guided the destinies of Oxford. Oxford was the nursery of the order, from the time when Richard Muliner gave the corporation a house and piece of ground for their use, and Brother Agnello, coming up from London, caused to be built a decent school in which he in-

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¹ A History of the University of Cambridge, p. 28.

duced Robert Grosseteste to deliver lectures, and the future eminent bishop of Lincoln brought that school into high repute—from that time the Gray friars became a power in the university. They made rapid strides in study, in disputation and in teaching. most eminent men in England considered it an honor to lecture under their auspices. Under the able administration of Adam Marsh, the Gray friars achieved a world-wide reputation for learning. Let one who has made a thorough and a loving study of them speak, though he was not of their visible communion, and to all appearances died not a member of their household. Professor Brewer says: "Lyons, Paris, and Cologne were indebted for their first professors to the English Franciscans in Oxford. applications were made from Ireland, Denmark, France and Germany for English friars; foreigners were sent to the English school as superior to all others. It enjoyed a reputation throughout the world for adhering the most conscientiously and strictly to the poverty and severity of the order; and for the first time since its existence as a university, Oxford rose to a position not even second to Paris itself. The three schoolmen of the most profound and original genius, Roger Bacon, Duns Scotus and Occham, were trained within its walls. No other nation of Christendom can show a succession of names at all comparable to the English schoolmen in originality and subtility, in the breadth and variety of their attainments."2 This unstinted tribute is not exaggerated.

That the Franciscans should achieve such greatness as a learned body is all the more remarkable, when it is remembered that Francis of Assisi, in making poverty his bride and the chief glory of his Order, had intended that poverty of spirit should extend to deprivation of intellectual food. He dreaded the influence of learned doctors upon his friars. He did not intend to create an order of students; his sole object was to form simple men in the mould of nature's own simplicity, detached from anything in life, and, most of all, from self, burning with love of God and zeal for their neighbor; men of the people, in touch and sympathy with the people, living amongst the poorest upon the fare of the poorest, going into pest-houses and nursing the sick, waiting upon lepers, loving whatever was loathsome in humanity, seeking and cherishing whatever was abandoned or whatever others shrank from; men free as truth. In moulding such men, he was laying the deepest and most solid foundation on which to build up the noblest intellectual superstructure. The spirit for study, the craving for knowledge, a spirit and a craving that have never been surpassed, filled the

¹ Monumenta Franciscana, vol. i., p. 17 and p. 549.

³ Monumenta Franciscana, i., preface, lxxxi.

very atmosphere of the thirteenth century. No body of men, with such noble aspirations as those possessed by the disciples of Assisi, could resist the inspiration of the hour, or keep pace with the progress of humanity, without utilizing one of the most Godlike gifts bestowed upon man-his intellectual endowments. As early as 1217, the Franciscans were installed in Paris, and it is not many years before we find them thoroughly equipped for educational purposes. In a short period they grew to be thousands. They provided for their own subjects a school of grammar, a school of rhetoric, a school of logic, and a fourth school for the study of the Sentences of Peter Lombard and the Physics of Aristotle. The hall for their advanced students was not excelled by any in the university. Their method was that of the university. They held two lectures in the morning—one on dogmatic theology, the other on particular issues requiring explanation. In the afternoon, there was a lecture on Holy Scripture, and from four to five the friars held open disputation, in which any comer was free to join.² In their rules of prayer, and missionary labor, and in devoting themselves to healing the ailments of body and soul, they acquired a training and received a special formation that the university could not give.

Their educational influence was many-sided. Mingling with the people, they cultivated the language of the people, and helped to fix the forms of our modern tongues; as nurses of the sick, they compounded medicines and learned the healing properties of plants; as missionaries, they travelled among many peoples, shrewd observers of men and manners and customs; as instructors of the people in the truths of their religion, they organized companies to enact, and enacted themselves, at times, in the ancient miracle-plays, the great truths of our holy religion; as disciples of their saintly founder who loved all things in nature, who called the sun his brother and welcomed death as his sister, they also looked upon bird and beast, flower and tree, with kindly and observant eye, and learned to respect and reverently investigate the phenomena of nature; and so it happens that a Vincent of Beauvais gives us the Cyclopædia of the thirteenth century, and that Roger Bacon makes his "Opus Majus" the forerunner of the "Novum Organum" of his namesake of four hundred years later; in the domain of art, the tender devotion that they inculcated for Mary

¹ See Luke Wadding: Annales Minorum, t. i., p. 248.

² Vaughan; St. Thomas of Aquina, pp. 228, 229,

² See the *Itinerary* of Blessed Odoric of Pordenone, in the *Acta Sanctorum*, under January 14th. From this book, and from the account of the Franciscan friar, Carpini, concerning the Tartars, Sir John Maundeville filched all that is truthful in his so-called *Travels*. See *Encyclopædia Britannica*, new edition.

Immaculate inspired the school of art which flowered into the Madonnas of Raphael.

The Dominicans were established with the formal purpose of occupying themselves with books and studies rather than with the singing of antiphons and responsories,1 for their sole mission was to preach the doctrines of Christianity and to refute heresy. Their courses of instruction were accordingly thoroughly organized from the beginning. In each convent, four officers were charged with the studies: The prior, who looked after the general conduct and the spiritual and physical wants of the young brothers; the lector and sub-lector, who taught in the schools; and the master of studies, who was always with the brothers, taking part in their exercises, presiding over their repetitions, assisting at their examinations, and even, at times, explaining the lesson. In the fourteenth century, to these were added a cursory reader and a chief lector. The youthful aspirant to the order was admitted at the age of fifteen, and was supposed to be instructed in all the preliminary branches of education. His novitiate, which lasted three years, was divided between study, spiritual exercises, and manual labor. The novitiate passed, the novice went through a three years' course of logic and rhetoric; his whole course in logic should extend to five years. This was known as the Studium artium. It corresponded to the course pursued in the university for a bachelor's degree. Its method was comprised in the three traditional words: Lectures, study, disputation—iegendo, studendo, ac disputando. The lector explained the text of the grammar, rhetoric, or logic, which the student had in hand; the student immediately withdrew to learn the lesson. Later, all assembled, and there were repetitions and colloquies or discussions in circles of students of the same capacity. There were semi-annual examinations, and formal disputations were carried on from time to time. By these means the student was prepared for the grand act of disputation.

The young Dominican then passed to the course of ethics and physics, provided he was adjudged "tried, instructed and of good health," for to none other was the course given. The course was known as the Studium naturalium. It extended over two years till 1372 when it was made thereafter a three years' course. It comprised natural philosophy, ethics, mathematics and all the sciences of that day. The treatises of Aristotle were pressed into service as rapidly as they were translated. It was the course in which the genius of Albertus Magnus was watered and bloomed into flower and leaf and ripened into fruitful and suggestive thought

¹ Theodosia Drane: Christian Schools and Scholars, vol. ii., p. 59.

² Provincial chapter of Montpellier, held in 1271. (See G. Douais; Organisation des Etudes chez les Frères Prêcheurs, p. 69.

in scientific matters; and how great Albertus Magnus was in the domain of natural science only a Poucher and a Humboldt can adequately tell. Even in that age Albert made permanent contributions to physical science.\(^1\) St. Thomas availed himself of this course so well that he was afterwards able to speak to the students of the University of Paris, upon the construction of aqueducts and machinery for raising and conducting water—de aquarum conductibus et ingeniis crigendis—as well as expound the Iimaus of Plato.\(^2\)

From this course the student passed to theology. The Studium Theologiæ lasted three years. It differed from the previous course in that there was no exemptiom from its curriculum. The subject was . so vast and so profoundly was it studied, it was never completely mastered. No member was too old or too learned to say that there was nothing more for him to acquire. Hence, all were required to follow the course. "The Friar Preacher," says Douais, "whether student or professor, assisted at the lessons in theology with the two-fold intent of not forgetting what he had already learned and of adding to his stock of knowledge." Here also, the method of teaching was in many respects similar to that pursued in the university. A text-book was read and commented upon by the lector. For a long time the "Sentences" of Peter Lombard was the text. Later, the commentaries were carefully written before being delivered to the students. Lessons were given every day except feast-days. The customs of the order recognized three kinds of lessons; the public or ordinary lesson at which all assisted; the private lesson given to backward students, and the extraordinary or cursory lessons similar to those of the university, generally imparted by bachelors without being seated in the master's chair. There were repetitions, colloquies and disputations as in the philosophy classes. Only a doctor in theology was permitted to preside over the disputations. The times for disputation were Advent and Lent. The rule rigidly insisted that all the brethren be present at these exercises, and it was only after the disputation that they were permitted to go out to preach. Humbert Romanus, one of the generals of the Order, in calling attention to the defects against which the students should guard, throws further light upon the mode of conducting the exercise. He is unsparing in his censure of those friars, even though they be doctors, who presume to to speak at all times in a light, flippant vein, without proper preparation, or without sufficient ability to discuss their themes. He is no less severe upon those who preserve an obstinate silence during the whole time of the exercise, whether through laziness, or tim-

¹ See Echard: Scriptores Ordinis Pradicatorum, t. i., pp. 162-183.

² Bulaeus, Hist, Univ. Par., t. iii., p. 408.

Organisation des Etudes chez les Frères Prêcheurs, p. 75.

idity, or dread of defeat. Some debated well, but their vanity was continually cropping out; in season and out of season they aired their knowledge when holy and learned men would have blushed to name the authors that they had read. Some there were who simply sought to get the better of the argument, regardless of truth; others lacked precision and clearness, while not a few were obscure and diffuse. Even the most penetrating minds, at times, became lost in minute distinctions that were vain and useless. These disputations among the doctors in theology were not carried on merely with a view of sharpening the wits, or carrying on an intellectual joust, or as a display of talent. Their aim was higher. It was for the search after truth, the probing of truth, the more complete expression of truth.

We have not yet exhausted the educational resources of the Dominicans. The Order had in reserve other courses of discipline. Each province was obliged to have two special schools for the more gifted of its subjects.² These schools were intended solely for those young friars whose aptitude gave promise of their becoming lectors one day. The friars were sent thither after pursuing the ordinary three years' course in theology. A doctor in theology, having under him a sub-lector, was placed in charge of each school. In 1290, a lector was appointed to teach special courses in exegesis and other biblical studies. These schools were known as the Studia solemnia. The method of instruction pursued in them was the same as that pursued in the lower course. The studies were simply broadened and deepened. Those pursuing them were not permitted to remain longer than three years.

Nor was this all. In certain centres, schools of higher study were established. They were called Studia generalia. They were no mere novices in learning who were sent up to these schools. They were men who had been teaching for years, and who now resumed their studies with the intention of winning the doctor's cap and of perfecting themselves in special branches. These schools were established in Paris, Oxford, Bologna, Naples, Montpellier and other university centres. Those who assisted at the course instituted in Paris did so with the view of becoming profound theologians; those who attended the course in Bologna had in view chiefly the study of civil and canon law; those who went to Barcelona intended to become skilled in the sciences of the Moors and versed in the Arabic and Hebrew languages. The discipline of these houses was severe. There was no vacation as in other schools; the courses were profound, and were carried on without

¹ Expositio retule B. Augustini, Biblioth. municip. de Toulouse, MS., 417 (I. 402, fo. 147 b.), quoted by Douais, loc. cit., p. 79.

² Douais, loc. cit., p. 127.

intermission during the whole three years that they lasted. None but brothers of approved health and tried powers of endurance, with a constitution equal to the great strain, were admitted to take up these courses. They were men who had already given evidence of their intellectual prowess as professors of philosophy, theology, Sacred Scriptures, or even as priors. Peter Lombard's book of "Sentences" was read through each year; there was also a complete course of biblical studies, besides the special branches that predominated in each school. Here the friars made a more profound study of the philosophical and theological errors of the day -and the very air was reeking with such errors—as well as of the Sacred Scriptures and the Fathers of the Church. The professors of the school were picked men. The superior called them together from all parts of Christendom. Once a week they held a solemn dispute. Such a dispute—deep, thoughtful, searching must have been quite a contrast with the wranglings daily going on in School street at Oxford or the rue de Fouarre at Paris. After fifteen years of study—not counting the years spent besides in teaching or preaching on the mission—these men must indeed have become well-equipped to proclaim truth and meet error, no matter the guise under which it should appear. In connection with this solemn and learned body of men discussing the great issues of their day one image fills the mind. It is that of the magnificent tribute which Raphael paid to the Real Presence in his sublime picture, La Disputa. There has the artist painted the very men who took part in such solemn discussions. And though Duns Scotus and Dante were more at home in the halls of a Franciscan convent, still we meet there the familiar faces of Albert and Aguinas. We should never grow weary of repeating the fact that the greatest glory of the Dominican Studium; indeed, of the mediæval university, is Thomas Aquinas. There was no principle of human reason that he did not lay bare; there was no problem in physical or metaphysical science that he did not grapple with and find a solution for; there was no prevailing error that he did not attack and pursue to its last lurking-place. The very construction of the propositions in his most scientific work, the Summa Theologia, the very words in which he formulates objections, are understood only in the light of the history of contemporaneous error. He fought no windmills; he set up no men of straw in order to knock them down. He dealt with living issues. He was in touch with his age upon all its intellectual wants and aspirations. When pondering over his marvellous pages, let us not forget that while much is due to the transcendent genius of their writer, much also is due to the admirable conservative method and rigid intellectual discipline of the Order in which that genius was moulded.

A student once asked Thomas the best method of becoming proficient in science. The rules laid down by the Angelical Doctor are few and simple and to the point, and reflect the serenity of his own life. They bespeak a rare habit of mental cautiousness. They may be summarized as follows: "Pass from the easy to the difficult; be slow to speak and equally slow to give assent to the speaker; keep your conscience clear; do not neglect prayer; be amiable towards everybody, but keep your own mind; above all things avoid running about from one school to another; let it be your delight to sit at the professor's feet; be more concerned to hoard in memory the good things said than to regard the person speaking; strive to understand what you read, clearing your mind of all doubts as you go along; eagerly seek to place whatever knowledge you can get hold of in the depository of your mind; find out what you can do, study your limitations, and do not aim higher than your capacity permits." These are golden words to be cherished by every student.

Such suggestions were especially valuable in those days. The spirit of university life was catching, and that spirit was a wild and lawless one. "The professors in great part," says Archbishop Vaughan, "were reckless adventurers, a sort of wild knighterrants who scoured the country in search of excitement for the mind and money for the pocket. The students were, in the main. disorderly youths, living in the very centre of corruption, without control, loving a noisy, dissipated life in town. They would rollick and row, and stream in and out of the schools, like swarms of hornets, buzzing and litigating and quarrelling with one another, upsetting every semblance of discipline and order." The picture is not overdrawn. It is merely a garbled transcript from the accounts left us by John of Salisbury, and Cardinal Vitry. " The distinguished traits," says Leclerc, "of this student life, the memories of which have survived with singular tenacity, were poverty, ardent application, and turbulence."4 The students were as riotous in intellectual matters as many of them were licentious in morals. No subject was too sacred for their curiosity; there was no truth that they were not prepared to challenge. The masters were bold and unscrupulous in their treatment of the holiest doctrines. Nay, so fond of novelties were they, that they were known to pay scholars to receive their strange teachings. The Franciscans and Dominicans, in the first fervor of their formation, every member

¹ There is here a play upon words that cannot be reproduced: Sellam frequentare diligas, si vis in cellam vinariam introduci.

² Opusculum, lxi. Opp. t., xvii., p. 338.

⁸ Life of St. Thomas of Aquin, p. 206.

⁴ Etat des Lettres au XIV. Siecle (see the whole passage), i, 269-271.

filled with the spirit of charity and zeal, conservative and orthodox in their teachings-more especially the Dominicans-were a standing rebuke to the masters and scholars who were given to novelties and unwilling to mend their ways. Even the better class of university men looked askance at the coming among them of these religious. They were regarded as intruders. The prejudice extended from the university to the court. The laureate of St. Louis attacked the Dominicans. "They preach to us," he says, "that it is sinful to be angry and sinful to be envious, whilst they themselves carry on war for a chair in the university. They must, they will, obtain it. The Jacobins are persons of such weight that they can do everything in Paris and in Rome.¹ the members of the university were not content with words. They attempted to boycott the religious. "The masters and scholars of the rival schools would not permit young men to attend the lectures of the Dominicans, nor allow the young Dominicans to be present at secular disputations and defensions." The spites and jealousies that were arrayed against them, found voice in the pamphlet-"Latter Day Perils"-of William of Saint Amour. It was a trumpet blast calling forth all the pent-up feelings that men had been nursing against the friars. We shall not enter into the details of this controversy. Suffice it to say that Thomas Aquinas was deputed to reply to the scurrilous tract, and he did so with all the calmness, scientific precision, and delicate sense of justice that characterize his works above those of his contemporaries. He met the issue in his own direct and simple manner. He asks: "Can regulars be members of a college of secular masters?" and replies that they most undoubtedly can, since the function that seculars and regulars exercise as teachers is based upon that which is common to both, namely, to study and teach. "The function of teaching and learning," to use his own words, "is common to seculars and to religious men; whence there is nothing to forbid religious men from being associated with seculars in the same function of study and teaching, even as men in diverse conditions compose the same body of the Church, inasmuch as they all agree in unity of faith." More regularly organized than the university itself, these religious schools had a staying influence upon her students, her professors, and her courses of study.

¹ Oeuvres Completes de Rutebæuf, t. ii., p. 251. The Dominicans were called Jacobins because their convent was on the St. Jacques,

² Vaughan: Life of St. Thomas of Aquin, p. 250.

^{*} Opusculum, i., cap. iii. Op. xvii., p. 11, ed. Parma. The same subject is discussed in the Summa Theologia, 2a, 2æ. Quaest. 187, 188. For a detailed account of the controversy see Vaughan, Life of St. Thomas of Aquin, pp. 208-367.

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IV.

We shall now descend to the university schools and from the various side-lights that have been thrown upon them, endeavor to catch a glimpse of the manner in which masters and scholars live and act therein. Throughout this intellectual seething mass, there are schools giving instruction in the whole gamut of learning contained in the Trivium and the Quadrivium. Here is a class of youths studying grammar. In the Middle Ages, grammar included literature and composition as well as the technical rules of construction. It covered the whole of the humanities. Maur defines grammar to be "the science of interpreting poets and historians, and of writing and speaking correctly." John of Salisbury, who resided in Paris in the latter half of the twelfth century thus describes the method pursued by his teacher, one of the most competent in his day: "Bernard of Chartres, not confining himself to grammar, threw in a thousand observations during the reading of his lesson, on the choice of words and of thoughts as well as on the variety and the pleasingness of style. . . . He cultivated carefully the memory of his pupils by obliging them to recite -some more, some less—the most beautiful passages from the historians and poets commented upon in class; and he always questioned them upon the lesson of the previous day. He exhorted them to confine their readings to what was good and edifying and gave them a daily exercise to compose in prose and verse."² This is an admirable method; it cannot be improved upon even to-day after the intervening experience of seven hundred years. Bernard of Chartres was an ideal teacher. In the following century the grammarians were not so painstaking. Both masters and scholars were impatient to tread the mazes of logical disputation; in consequence, we find a falling off in the matter of style. "The youths of the universities, but ill-furnished with books, and be it said, but ill-disciplined, passed through the grammar classes rather unprofitably. They remained in them the least possible time, being attracted by the ever-increasing vogue of Aristotle." We enter one of these grammar schools. The scholars are all in one room. Here is one coming from the master after reciting his lesson and having had his exercise corrected. He goes to his place, procures his tablets, a pen and ink and some parchment, and seating himself at a long table running through the centre of the room transcribes the corrected exercise upon a small sheet of parchment. The lettering is small and cramped; the words are abbreviated.

¹ De Inst. Cler., lib. iii., cap. 18,

² Metalogicus, lib. i., cap. xxiv. Col. 854, Migne ed.

³ Ch. Daniel, S. J., Des Études classiques, chap. vi., p. 138.

would like to know the meaning of the line inscribed in this manner:

"Tityre t p r s t f."

The teacher has been alluding to Virgil, and this is evidently a shorthand report of some line in that author's works. Here it is; the word *Tityre* gives the clue.

"Tityre, tu patulæ recubans sub tegmine fagi."

The youth next to him is taking notes in logic. He is evidently quoting an extract from Occham's Logic in the following condensed form: "Sic hic e fal sm qd ad simplr." Here is the text: "Sicut hic est fallacia secundum quid ad simpliciter." The less the scholars placed upon parchment, the more they engraved their lessons upon the tablets of memory. Moreover, paper and parchment were expensive commodities in those days, and were therefore to be sparingly used. Even as late as 1502 the amount of paper assigned to each scholar for the purpose of note-taking was three sheets a week.²

Let us pass to another school. This is the Place Maubert which shall long continue to embalm the name of Albert the Great. That dingy humid street in the neighborhood, is the street that Dante has made immortal in his great poem; it is the rue de Fouarre.3 It is not an inviting street to enter. From early morning it is the busiest and noisiest thoroughfare in Paris. The students regulate their rising by the bells of the neighboring churches. The mass-bell of the Carmelites whose convent you may notice on Place Maubert gives the first signal at five o'clock. An hour later Notre Dame strikes Prime.4 Then the student who boards out quits his den, and descending the stairs carefully, takes his shortest course through the by-ways and alleys to the rue de Fouarre. He enters one of these low, ill-ventilated halls with a damp heavy smell. The master is seated on a stool; it being a winter morning three or four candles spread a dim light through the heavily laden air, and the students, seated upon small trusses of straw, take notes of the lecture read by the master.5 We already had a glimpse of a school of arts; then let us pass to a school of theology.

The room is also low and dingy; the light is inadequate. There are no benches; but here and there are some blocks, and there is an abundance of straw. The master sits in a large chair raised on

¹ Vaughan, Life of S. Thomas of Aquin, p. 199.

² Pasquier, Recherches sur la France, t. i., p. 920.

⁸ Paradiso, x., 136-138.

⁴ Bulæus, Hist. Univ. Paris., t. iv., p. 413.

Alfred Franklin, La Vie privée d'Autrefois ; Ecoles et Colleges, p. 168.

a platform. The chair has a high straight back and arms, and can easily seat two. He who is beside the master is an aspirant for the licentiate. But the master predominates over the aspirant and over the school.1 Now, note the method pursued. It is composed of two parts: the reading and explanation, and the disputation. All teaching is done orally. "The act of instructing by the living voice," says Vincent of Beauvais, "possesses I know not what hidden energy, and sounds more forcibly in the ears of a disciple as it passes from the mouth of a master."² The master was at first accustomed to speak altogether without a manuscript; later in the history of the university, he read or dictated from his manuscript a commentary upon the text. But when, in 1354, Cardinal d'Estouteville reformed the university he reverted to the practice of commenting without manuscript. Indeed, the teacher was placed under oath not to read from a written commentary upon the text under discussion, lest he might cease to prepare his lessons properly.

The master is now prepared to give his lesson. The "Sentences" lies open on his lap; the students are seated around in groups; some are kneeling upon one knee with tablets in hand, prepared to take notes; some few have their own text-book, but the majority are content with getting a glance at the copy in the hall for their use. The master first reads a proposition from the Lombard. In a subdued voice and familiar tone, slightly ascending,3 he discourses upon the proposition, the scholars in the meantime, as rapidly as possible, in that species of shorthand which we have already been inspecting, writing down the explanation. Hear how neatly he gives the reason for each division of the text, for each paragraph, for each sentence, for the terms employed, and note how clearly he makes the consequences to flow therefrom. master having ended his explanation, the students compare notes and settle upon the sense and the very words of the discourse that they have heard. Some teachers, more careful than others, in order to avoid misunderstanding, or a garbled version of what they had said, dictate their explanations. In 1492 it was made a general rule that the shorter morning class be devoted to dictation.4 However, in the thirteenth century, the master, whose lessons we are attending, was content with explaining the text by a running commentary, leaving the students to carry away from the lesson as much as they could, or as they cared to reproduce. The following was the method set down in the Oxford statutes: The masters

¹ D'Assailly, Albert le Grand, p. 186.

² Speculum Doctrinale, lib. i., cap. 37.

De Disciplina Scholarium, cap. v., Migne ed., vol. lxiv., col. 1234.

Du Boulay, Hist, Univ. Par., t. v., p. 808.

shall read the text in order; then they shall explain it fully and openly as the matter requires. The explanation being duly arranged, they shall afterwards choose notable passages from the text to be remembered. Lastly, they shall raise points for discussion, but only such as naturally arise from the text, so that no prohibited matter be taught.¹

However, the chief element of university training was not the lecture; it was rather the disputation. Master disputed with master before the students; the master disputed with his scholars; the scholars disputed with one another under the supervision of a determinant who was present to repress quarrels, correct errors, prevent disputes from degenerating into personalities, and mark the indolent ones refusing to take part in the debate. The exercise was at times abused by teacher and pupils. Propositions were discussed apart from their connection; distinctions were made and divisions and subdivisions were entered into with a degree of ingenuity that only such practice as was then prevalent could achieve. This process of dialectic refining was carried to the farthest extremes. Thus Stephen Langton, who is known in history as the champion of English liberties, was previously known in Paris as a student whose work was no less solid than brilliant; one of the most enlightened expounders of the Scriptures, and a powerful preacher, with a strong musical voice that could reach any audience. Even Stephen Langton could not resist the prevailing practice of refining thought and seeking a new meaning for simple words. And so we find him taking a well-known love ditty of his day,—Belle Aaliz mainz s'en leva,—and with a view of turning bad into good, writing a commentary upon it, giving it an allegorical and spiritual sense.² Each professor sought to excel his rival in logical distinctions, divisions and sub-divisions. Each student vied with the other to pick flaws in his arguments; each sought to overwhelm the other and confuse his mind by subtle distinctions beyond his grasp. There was no exemption. No other road was open to the winning of honors; therefore should each be on the alert to answer every objection with all the vim possible. Should one refuse to take part in the debate, his silence would be imputed to ignorance or arrogance.3 Disputation was the great field of triumph, and in consequence the greater part of the day was spent in disputation.

What was the daily regulation of university life? We may out-

¹ Munimenta Academica, vol. i., p. 288.

² He makes Alice the Blessed Virgin, and thus speaks of the name: "Hoc enim Aalis dicitur ab a, quod est sine, et lis, litis; quasi sine lite, sine reprehensione.—Bibliotheque Nationale, MSS., lat., 16,497.

³ De Disciplina Scholarium, cap. iv., Migne ed., col. 1234.

line it as follows: The first lesson, as has been seen, was given in the morning early. The students then withdrew and arranged the matter of the last lesson, or prepared for the next, until the hour for dinner, which was generally at ten o'clock. At noon they carried on disputations, which, from the hour, were known as meridionals. At five there were repetitions of lessons and conferences, during which the scholars recited and answered questions put by the master. On Saturdays they had recapitulations and repetitions of the lessons given during the week. These were solemnly carried out under the supervision of the chief master of the school. There has been preserved for us a daily regulation of college life in Cambridge, which, though mentioned by Lever in the sixteenth century, runs back among college traditions as far as the memory of man goeth. We shall put it in the words in which Cardinal Newman expressed it. The student "got up between four and five; from five to six he assisted at Mass and heard an exhortation. He then studied and attended the schools till ten, which was the dinner hour. The meal, which seems also to have been a breakfast, was not sumptuous; it consisted of beef in small messes for four persons,1 and a pottage made of its gravy and oatmeal. From dinner to five P.M., he either studied or gave instruction to others, when he went to supper, which was the principal meal of the day, though scarcely more plentiful than dinner. Afterwards, problems were discussed and other studies pursued till nine or ten, and then half-an-hour was devoted to walking or running about, that they might not go to bed with cold feet,—the expedient of heat or stove for the purpose was out of the question."2

But we are here trenching upon college discipline and college methods in the universities, a subject that shall claim our attention in another article. In the meantime, let us beware of losing sight of the true proportions of our mediæval universities in our eagerness to pry into details concerning them. Looked at in their historical setting, they stand out among the greatest creations of the spirit of Christian truth. They were the institutions of highest culture, the centres whence radiated the latest word in science and the most advanced wave of thought.

BROTHER AZARIAS.

^{1 &}quot;A penny piece of beef among four," is Lever's expression. Sermon Preached at Paules Crosse, Arber's Reprints, vol. iii., pp. 121, 122.

² On Universities, pp. 330, 331.

SOCIALISM: ITS HARM AND ITS APOLOGY.

Socialism Exposed and Refuted. By Rev. Victor Cathrein, S.J. A Chapter from the Author's Moral Philosophy. Translated from the German by Rev. James Conway, S. J. New York, Cincinnati and Chicago: Benziger Brothers.

**CEPTING Fourier, perhaps, there is not a single serious socialist in France," remarked M. Leroy-Beaulieu a few weeks ago to a well-known contributor to the "Figaro." And then he added: "In France we have a singular mania for constantly seeking a universal panacea, and for promising a mass of chimerical benefits which would result from this or that system." We have only to change the word "France" to Germany, England, or America, and the same observations would hold good. A "serious socialist" is as rarely to be met with in Germany, in England, or in America, as in the land of Proudhomme, Louis Blanc, and Lafargue; while "the mania for seeking for universal panaceas" is a natural product of the chronic sufferings of any multitude. Socialism, arnarchism, communism, are but experiments for the mitigation of evils which have sprung from the two following causes: financially, from the altered conditions of trade; and morally, from the selfishness of the wealthy classes. We must not be too severe upon the theorists. It has been the misuse of property, the greed of the capitalists, the indifference of the prosperous towards the unfortunate, which have given color to the accusations by the laboring classes, and which have justified their hostilities to their task-masters. Utterly impracticable, even impossible as is socialism; equally subversive as it would be of the liberties of whole communities, and disastrous to individual aspiration; its real paternity must be sought for in the moral defects of the "superior" classes, a good deal more than in the restlessness of the sons of toil.

Of the numerous writings which have been published on the subject of socialism we may award the palm to Father Cathrein's able treatise "Socialism Exposed and Refuted;" for though it be only a Chapter of his "Moral Philosophy," its great value is that it is a profound study of German socialism, as it is now developed, theoretically, by its highest masters; "the Germans," as Father Conway says in his Preface, "having the very question-

¹ Translated from the German by Rev. James Conway, S.J., and published by Benziger Brothers, of New York,

able merit of having given to modern socialism a systematic and scientific form. Whatever there is in English and American socialistic life and literature is but an importation, a plagiarism, a bad imitation of German socialism." In England the imitations are specially feeble; the reason being that English socialists are more negative than they are constructive in their theories of re-constituting society. The English socialists are not given to chimeras or panaceas, so much as to the division of spoil. Indeed, it is only recently that the disaffected classes have been taught by their chief orators that there must be "science" in a successful revolution

The first question we naturally ask ourselves is: What is socialism? The next question is: What are its fallacies?

Socialism, anarchism and communism are a sort of positive. comparative and superlative. Communism has never found serious defenders; for to appropriate private property, under the plea of a common good, would be only to make the law the big gest of all thieves, and would put an end to all aspiration and motive. Anarchism, in lesser degree, would wish to exclude all central control, and to secure political and economical independence for separate unions or groups of the laboring world. Socialism, which has been called "the political economy of the suffering classes," has a good many divisions and subdivisions; its political, social and economical bearings necessarily jarring in constant strife. The socialists who would put everything on a democratic basis call themselves, generically, social democrats; and advocate the transformation of all capital, or means of labor, into a sort of common bank or treasury for the community; to be administered by the State for the benefit of of all, with some sort of arithmetical equity. The theories and the realizations of such socialism are so conflicting, that it will be better to take a glance at the growth of the theories, by way of measuring the extreme difficulties of the realizations.

Though communism, anarchism, and socialism are modern in their breadth and their activity, their theoretical ancestry is very ancient. Before Christ, 1300, on the island of Crete, there was a primitive attempt at a communism, which Lycurgus, in his proposed Spartan constitution, adopted as the groundwork of his ideal. Plato also, in his Republic, commanded community of goods and also community of education. Aristotle, however, who had studied these systems, condemned them as untenable or impracticable. When we come to Christianity, we find a community of goods to have been approved by some of the very earliest converts; but this was because "voluntary poverty" was accepted as a "counsel of perfection," which is an estimate

utterly alien to modern socialism. Besides, among the Christians, there was no binding obligation to "sell all they had and give to the poor"; there was free choice as to giving all or keeping all, so that there was no sort of sympathy with modern communism. They who quote the "Acts of the Apostles" for a justification of their views as to private property are forgetful of these three distinctive features: (1) That the Christian converts were impoverished by their conversion; (2) that the motive of Christian communism was heroic charity, and that (3) the adoption of this lofty standard was voluntary.

Modern socialism is about a hundred years old, and the first writer who gave form to its aspirations was Count de Saint Simon (1776-1825), who concluded that labor was the standard of economics, and that therefore laborers must take the first place in society. Fourier, who was more practical than St. Simon, proceeded to build up a system of socialism, though neither Fourier nor St. Simon ever got so far as to advocate the total abolition of private property. Louis Blanc warred on free competition, as being the root of all economic disturbances, and wanted the State to be producer in chief, so as to make private production impossible. Karl Rodbertus was the first scientific (German) socialist: and he took the ground that "all goods, considered from an industrial standpoint, are only the product of labor, and cost nothing but labor." Karl Marx played a still more important part in his elaborate treatises on exchange-value and use-value, and in his condemnation of surplus-value, or capital; though he argued that, while "part of the produce of labor should be employed for new production, the rest should be for use and be distributed as became private property." Ferdinand Lassalle, the great agitator, whose phrase, "the iron law of wages," has passed into a household word among socialists, followed closely on the same lines as Marx. And from these teachers, in chief, have come the present phases of socialism, which, in Germany, are known as social democracy; in France and in England as collectivism; and which in both countries are in rivalry with communism.

Let us take the first section only of the "Gotha programme" (1875), as indicating the first principles of modern socialism. "Labor is the source of all wealth and culture, and since universally efficient labor is possible only through society, it follows that—the universal duty of labor being supposed—the entire product of labor belongs with equal right to the entire body of society, that is, to its individual members, each according to his individual wants." The rest of the lengthy programme may be briefly described as a far advanced and carefully schemed Radicalism, in-

cluding, of course, the captivating condition, "Religion to be declared a private matter." But now let us take a glance at the "Erfurt Programme" (1801), which is very lengthy, and from which the following extracts may suffice: "Only the transformation of private capitalistic property in the means of production, i.e., land, mines and mining, raw materials, tools, machinery, and means of communication,—into common property, and the change of private production into socialistic, can effect that the extensive industry and the ever-increasing productiveness of social labor shall become for the down-trodden classes, instead of a fountain of misery and oppression, a source of the highest prosperity and of universal and harmonious perfection. This social revolution implies the liberation, not only of the laboring class, but of the entire human race." It may be here noted, since we must be brief in our quotations, that socialism, in America, is practically identical with socialism in France, Germany and England; the socialist congress held in Baltimore in 1883 declaring that "Labor being the creator of wealth and civilization, it rightfully follows that those who labor and create all wealth should enjoy the full result of their toil." So that as Father Cathrein observes: "The only difference between the socialists of the various nationalities is in their tactics, not in their principles; and in no other country have their principles been so scientifically developed as in Germany."

II.

"The fundamental principles of socialism," says Father Cathrein, "belong not to economical but to metaphysical science." This touches the pith of the whole matter. Such fallacies as (1) the primary principle of the equal rights of all men; (2) the insisting on industry being the sole gauge of emolument; and (3) the materialistic estimate of all existence, as though man's soul were too dreamy a thing to be reasoned about, are fatal, to begin with, to any system of economics; for wrong principles cannot produce right remedies. "Equal Rights" must mean "absolute equality," however much the theories be kept distinct. The more intellectual of the socialists have tried to keep the two distinct, and have pleaded only for "a natural aristocracy." This sounds well, but it is impracticable. Every one sees that, under any conceivable system, there must be political and social inequality; just as every one recognizes that, in the sight of God and man, every man has an equal right with all his fellow-men to be treated with justice and with generosity. But the very variety of human beings -youth and age, wit and dulness, health and sickness, not to speak of the moral differences, which are quite as wide-proves

that the Creator has designed us all for different pursuits, and that the creature must submit patiently to his destiny. The natural difference between the sexes—which the socialist seeks to lessen opposes a fatal barrier to "absolute equality." The state of marriage and the state of singleness oppose like barriers. And even if equality were forcibly achieved,—an external and apparent formal equality,—it could not possibly last twenty four hours; for, as Father Cathrein puts it: "A gardener may effect that all the trees of a park are equally high or equally low; but only Such an unnatural conby continued and violent pruning. dition however, cannot be lasting." And as with family relations, and with social relations, and with professional relations, so also with the whole domain of personal aptitude; nothing can be more unreal than to believe that a forced education can result in a forced aptitude for all vocations. The State can have no more power to compel all intelligences to be equal, than it can have power (or moral right) to prevent the skillful or the industrious from taking precedence of the incapable or the indolent.

Nor is the theory of "universal compulsory labor" either a natural or a salutary conception; for it gets in the way of the culture of the higher faculties, and is fatal to the education for the priesthood, to the education for the arts, sciences, and special pursuits; while it simply converts all society into one great productive union—productive only in the gross, material sense, but not productive in either the religious or the refined sense. Indeed materialism is one of the worst evils of socialism; for we are bound to conclude, on the united assurance of all socialists, that the primary object of human life is material gain; so that Christianity, as even the feeblest sects have understood it, is to be banished from the ideal social state, and is to be supplanted by at least a political atheism, which must result in religious persecution. The Christian precepts of obedience to authority,—on the part of children to their parents, and of the laity to the pastors of their communion,—are to be set aside for ever; and for what? For obedience to the State, which will banish religion from its schools; which will dismiss the Name of God from its civilization, and which will insist on the "philosophy" of Karl Marx, that "religion is a fantastic degradation of human nature;" or on the "science" of Liebknecht, that "socialism must conquer the stupidity of the masses, in so far as this stupidity reveals itself in religious forms and dogmas;" or on the "enlightened" teaching of Dietzgen, that "a cultured human society is the supreme good in which we believe," or on the "advanced principles" of the socialistic official organ, the "Volkblatt," that "Christianity has brought no redemption: we believe in no Redeemer, but we believe in redemption;

no man, no God in human form, no Saviour, can redeem humanity; only humanity itself, only laboring humanity, can save humanity." Thus we have materialism, pure and simple, set up as the God of the new socialism; warfare on Christianity being its negative religion, and the adoration of human equality its positive.

Father Cathrein has two chapters on Economic Principles, in which chapters he discusses Karl Marx's theory of values, and his assertion that labor alone constitutes exchange-value; and also enters minutely into the "iron-law of wages," in reply to Lassalle's favorite weapon. It would be beside our purpose to attempt to sketch the author's reasoning, but it is strictly within our purpose to notice one admirable section, called "Liberalism the root of the evil." It is not intended, in this section, to refer to the liberal political party, but to the revolutionary and anti-Christian tendency which is so rife in many countries of the world. Socialism is the lineal descendant of this liberalism, though the parent may be scandalized by its offspring. Atheism and materialism were never bred of Catholic principles; they were bred of those principles which could welcome Darwin as an apostle, as previously they had welcomed the French Encyclopædists; and as to-day they warmly welcome such professors at universities as decry faith as old-fashioned or superstitious. And just as, morally, socialist principles are but advanced liberalism, so, politically, the liberal enforcement of unlimited industrial competition with the aid of modern discoveries in trade-swiftness, and with the facility of amassing capital by the few fortunate ones, are so many progenitors of the modern extravagances called socialism—a fictitious remedy to meet the evils born of liberalism. And what could be the only true remedy? Father Cathrein gives an answer-at least suggestively. "He who would make an efficient stand against social democracy or socialism, and bring about a permanent betterment of our social conditions must renounce liberalism, and return to the platform of full and unrestricted Christianity."

But now to consider more particularly such of the objections to socialism as may be said to be equally moral and philosophical. To begin with, socialism is *impossible*. Not that a refined and equable social system would be impossible under favorable conditions; but only that the conditions which now govern all society would be absolutely fatal to a pure socialism. Human nature, as a prime impediment, stands in the way. Human nature is not angelic, and never will be; so that selfishness, pride, and even injustice will always dominate all schemes however perfect. Moreover, the bright side of human nature would be as fatal to socialism as its darker or deeply selfish side; for in every man there is some degree of aspiration, and in some men a positive fire of ambition,

so that an iron-cased schedule of socialistic rules and principles would be as a strait-jacket to the better sort. Indeed what we may call the moral difficulties are more stubborn, more fatal than are the difficulties in pure economics; though these latter are absolutely inseparable—perhaps chiefly because they contradict human nature. And at this point we will digress just for one moment to notice three of the proposed changes in the social order; because these changes must be seen to beget *moral* difficulties, quite as much as economic or political. We allude to (1), the difficulty of drawing the line between anarchism and a despotic central authority for all countries; the rivalry of separate communities being as certain to beget hostility as the unification of all communities to beget stagnation.

Again (2), as to the division of separate producers among the entire people, no arithmetic could do it (on so large a scale) with due reference to relative values and relative merits. And so, also (3), as to the new theory of "public scrutiny"; if all goods, both productive and consumable, are to be subjected to the judicial scrutiny of overseers, what a fearful servitude must ensue from such surveillance, and how completely the new system would put an end to domestic life, as well as to social and neighborly life. Liberty, of all kinds, must disappear under a system in which the value of all one's products is to be determined by a committee; in which even what one should eat and drink, and wherewithal one should be clothed, must be overruled by a board of overseers. The almostequality, also, of all private incomes would be tediously insipid and uninteresting, the more so, as every income must be smallso small as to forbid any indulgence. Men would long for the luxury of getting into debt, as a slight relief to the monotony of their careers. The tyranny, too, would be as bad as the monotony. Thus, the tyranny of being compelled to report all one's private wants to a local bureau, in order that they might be approved or disapproved, would be insufferable to a people born free: while the difficulty of determining who should serve and who should be served, would be only equalled by the difficulty of keeping one's private affairs secret-since the public registers would contain the details of one's daily needs.

And now to touch, though by mere allusion, on the three most important aspects in which Socialism can be viewed by Christian peoples—those of the family-life, of education, and of religion. As to the family-life, Bebel, a great authority, teaches that marriage is a "private agreement." "If disagreement, disappointment, or disaffection should arise, morality demands a disruption of the unnatural and, consequently, immoral alliance." "Free-love" is, therefore, to take the place of Christian marriage. And it must

follow, that all children, born of transitory contracts, must be at the mercy of spasmodic domestic harmonies, and must either be left with no education at all, or must be educated and cared for by the State. Family-life, which is the basis of Christian nurture, must be transformed into capricious tutelage and association—fathers, mothers, and children, being no more sacredly united than are the members of a private club or association. Moreover, the State taking the position of general provider for all the wants, duties, and expenses of parents and children, the Christian estitimate of the mutual services of parents and children would be perverted into a mutual secular disregard. And it is manifest that, in such relations, the Christian idea of education—involving the whole training of mind and soul—would have no more place than it would have in a charity school; education becoming no more than household discipline,

As to education, in a secular sense, how can the massing of all children in a quasi-military State-system of uniformity tend to the strengthening of the moral character or of aspiration, or even tend to the bringing out of individuality? All children, say the Socialists, are to be instructed, to be "educated," in all branches of knowledge and industry—a system which must result in mere shallowness and superficiality, and which, at the most, could mean "cramming," not "education." The Socialists admit many of the difficulties. They see what must follow after school-time. They see, that in the choice of businesses—in the whole domain of personal aptitude, or in the very delicate question of "vocation" there would be a rush towards this pursuit or that pursuit, so that the labor-fields would be deserted for pleasant grooves. must, therefore, give authority to the body-social to compel members to adopt this or that pursuit; and hence the freedom which is assumed to be socialistic, would be transformed into unbearable tyranny. But, indeed, it would be impossible that all young people should be "educated" in such fulness as should fit them for various pursuits; impossible that, as Paulsen puts it in pleasant satire, "the self-same individual should be letter-carrier to-day, to-morrow should perform the duties of a post-office clerk, on the third day should act as postmaster-general"; and so on through all the businesses and professions. The socialistic idea of fitting all men for all work; of creating such universality of aptitude, in the vast majority of the members of society, that they should be both able and willing to do anything or everything at the beck and call of a State committe or of a bureau, is the idea of turning the human mind upside down-an extravagance which has no warranty in our experience.

As to religion—if it be necessary to add anything to the testi-

mony which has already been adduced—we see that, everywhere, an overt antagonism to Christianity is the most prominent characteristic of Socialism. Even in Spain-an emphatically Catholic country—at the most recent of the congresses of the Socialists, Mdme. Paula Mink, a professed freethinker, was warmly applauded by her hearers when she uttered the following "free" sentiments: "We fight Clericalism, it is true, but it is not the only ravager. Clericalism will exist as long as there are capitalists to support and pay it." Now, by "Clericalism" all freethinkers mean Christianity, in its dogmatic or divinely authoritative character; and since Christianity devoid of that character is not Christianity at all, we apprehend the mortal warfare of the Socialists. "Capital" is to be done away with, because its patronage is a material succor to the structural part of the visible Catholic Church; and then the State committees, the local bureaus, in happy socialistic times to come, will undertake the kindly patronage of infidelity. Thus it is seen that the two evils go together—the destruction of the real liberty of the subject, and the eliminating of divine teaching from the natural life.

III.

Let us, however, be thoroughly just to the Socialists; and admit that they have two grand facts on their side—the one, that all society is in fearful need of reformation; the other, that mere preaching will not reform it. The Socialists have sound reason for discontent, and, as we know that their discontent has been the parent of their socialism, let us glance for one moment at a few particulars. To begin with, the ground-work of the discontent may be roughly set down perhaps as follows:

(1) That labor has been increased instead of lessened by the invention of a thousand labor-saving machines; while (2) the laborer can derive no pecuniary benefit, either in the near or far tuture, by the saving which is effected by these machines, all the wealth passing into the hands of the owners of these machines, and remaining there without a chance of distribution; and (3) thus the wealth goes on increasing to a magnitude which becomes colossal, and which is, indeed, a burden to the over-prosperous capitalist; while the poor man is so weary with his never-ending toil that he has no time for rest, leisure or culture—the rich man multiplying his luxuries and his extravagances, and the poor man multiplying only his sorrows. Thus much may suffice as to the general controversy. And imagination can supply the details of the discontent. We will, however, proceed to indulge our imagination on this subject of the grievances of the poor classes, keeping strictly to the view taken by the Socialists; so that we may be able to realize

how fully justified is their complaint, though their panacea is impracticable and impossible. Indeed, the more we realize what there is of truth in their reproaches, the nearer we must necessarily get to a true solution.

The socialists, then, may be imagined as addressing the capitalists as follows: You rich men live on your interest and your dividends, while the poor seamstresses make shirts for a shilling a dozen. Thus the idle fare sumptuously every day while the workers often die of starvation. And yet you rich men are always talking to us of our "duties." We of course have our duties; you have none. Your duties, so it appears, are to revel in pleasures and in purchases, or in the enjoyment of the intellectual or the artistic, while our duties are to raise our hats to your incomes, and bow the knee to your worldliness and your ease. But you say to us, by way of offering us consolation, that we have freedom politically if not socially, since we can return our representatives to Parliament; we can agitate until we obtain what we want. No. we cannot; for the powers that be in every country are determined to stem the tide of democracy. We are in every country the victims of a game of State-craft; we are called the "residuum," the "refuse," the "proletariat"; and our superiors are bent on depriving us of sufficient leisure to enjoy sunshine or repose or mental culture. All laws are framed to keep down the workingclasses, lest they should ruffle the sweet serenity of the capitalists. What freedom we have gained, we have gained, not with the aid of, but in spite of, many centuries of landlordism, so that our wrongs are now crying to the Creator for vengeance, and that vengeance we shall witness in a few years. But once more: You capitalists upbraid us because we are "unthrifty," "unsaving"; because we waste part of our earnings in gin palaces or beer shops; because we do not "lay by," as we see that you do, and make provision for the rainy day and old age. Now, apart from the fact that the working classes, as a rule, are much more self-denying than the wealthy classes, there remains the truism that extreme want or unhappiness necessarily engenders a disposition to rash pleasures. What are the spirit-shops but the momentary paradises of crushed classes, who, feeling that they are neglected, looked down upon, despised, by the fine gentlemen and fine ladies for whom they labor, naturally have resort to the company of their fellow-sufferers in low and cheap cabins of dissipation; while you fine gentlemen and fine ladies dine at night off costly viands and costly wines, not caring two pins for the outside sufferers. We maintain that, as a class, we workers are more moral, more thrifty, more sympathetic than you capitalists who give your checks to churchwardens; and we throw back your taunts with contempt,

and recommend you to keep your preaching for yourselves. While as to your reproach about our "not making provision for old age," how is it possible for a man with five or six dollars a week, and with five or six children to bring up, to lay by a store for years to come? If even you "gentlemen," who enjoy large official salaries for doing work which we should account play, are obliged to "retire" on handsome State-conferred pensions, how can we, out of our bread-purchasing dollars, put by so much every year into the 3 per cents? Unreal, insincere, hypocritical! Workmen have no more and no less of original sin than their betters who have large incomes to indulge it; as a class they are more deserving than their betters, who (the majority of them) "deserve" to lose all they have.

But waiving these personalities (which we hear almost every day), what are the gravely proposed "panaceas" which the socialists assure us will be practicable? A few moments of analysis will suffice for us. Let it be borne in mind that it is against all landlords and all profit-mongers that the socialists are united in declaring war. In every country the socialists attribute every grievance to the ascendancy of these two "accursed classes"; the interest of these two classes being wrapped up, say the socialists, in the impoverishment of the toilers who work for them. These two classes are bound to oppress and debase humanity in order to elevate themselves and amass wealth. All other classes, save the landlords and the profit-mongers, contribute their share of labor to the common good. Physicians and lawyers, architects and artists, musicians, men of science, or men of letters, even poets and the higher class of romancers, give and take in regard to labor and enrichment. Education and the fine arts, like all pursuits of the higher culture, have their places in the grand markets of the world's fair. There are two classes, and two only, who take everything and give nothing, and who are therefore the giant enemies of the Commonwealth; and these are the capitalists and the profitmongers.

For the landlords and the profit-mongers—so the socialists assure us—are the only utterly useless members of society; they are the devouring monsters of the wealth and industry of the masses, appropriating to themselves the goods they have not earned, and the raiment for which they have not toiled nor spun. "They have no more right," says one English socialist, "to obtrude themselves on society than a wolf or a tiger has to make one of a Christmas party; they exist only for the impoverishment, corruption, enslavement and destruction of the human race." The history of the human race is little more, we are assured, than a history of the wars, conspiracies and giant frauds, which these two

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classes have perpetrated from century to century in order to blot the image of God out of man and render him a beast of burden to the aristocracy. "Hellish classes," "colossal criminals," "devourers of the salvation of souls and bodies," are some of the epithets which are attached to all capitalists, whether they be great land-owners or monied men.

Now, assuming for the moment that there is any justice in this estimate—and we have endeavored to state it fully and without prejudice—we should at least look that the methods for a readjustment should be equally scientific and practical. Still keeping, then, to the socialist's estimate of the evil, let us see whether we can approve of their remedies.

Labor and capital are equally necessary to production. There are three kinds of capital: the land, human labor and money. The last of these is now the despotic master. What is money? (we are, of course, reasoning after the manner of the socialists). Money, having its origin in possessions plus labor, cannot possibly be the property of the possessors only; for even in the case of the possession of a machine, the machine cannot create work-it rather displaces it-so that to the laborer belongs at least a partproprietorship. In other words, the capital which is accumulated from machinery being furnished by labor, not by the machine, ought in justice to be shared by the laborers; and all the advantages which are derivable from that machinery-lightened labor and easier access to commodites—ought to be enjoyed by the laborers who create capital, and without whom there could be no capital at all. Labor, therefore, is the sovereign master and dictator, instead of being a hired slave and dependent.

How, then, ask the socialists, shall labor be emancipated so as to take its rightful place as lord and master? Co-operation, they say, alone can effect it. Just as no one man can work by himself and for himself, but must need his fellow-man for an earnest partner, so in all efforts after social improvement, co-operation is the only force that can bring it about. Co-operation, therefore, must be the primary State maxim in regard to possession, distribution, and equalization, credit-funds being opened by the State for the advancing of required moneys to approved associates, with a view to any industrial purpose. Capital must henceforth be deprived of the right of dictating any terms to the laborers; capital having no more right to dictate to a laborer than a block of marble has to dictate to a sculptor how it shall be fashioned or with what grace. The present use of capital means monopoly, and it was monopoly of land that drove the workingman into the factory, just as it is now the monopoly of machinery which deprives thousands of laborers of daily food. And yet the capitalists say to

socialists, "the workingman is free." Yes, free to starve and to beg and be sent to prison; free to sleep on a door-step and be called a vagrant; free to parade the streets asking for work and to be committed for risking a breach of the peace. No; freedom will never come to the workingman so long as monopoly is his master. For monopoly of land and of machinery is the monopoly of all employment of labor; and what is this but the chaining of multitudes to the chariot of one tyrannical master? You must give the people the freedom of the land, and so the production of food, which is real wealth, will be made easy, while poor rates and taxation will decrease, and a self-supporting peasantry and a betterpaid wage-class will replace the smock-frock and the starved poor. Machinery, in the same way, must be possessed by the many, and must be used by the many for the public good. Thus, co-operation will be the salvation of society, and a happy socialism will take the place of a state of society in which a few greedy tyrants live in luxury and wantonness at the expense of many millions of their betters.

Thus much may suffice for an attempt to "state the case," as socialists in most cases have stated it. We have not consciously weakened the force of their arguments; for this would be as unfair as it would be useless. We must fully admit that there is a force—a moral force. And because we admit this—in senses we shall now speak of—we will at once turn to the Catholic solution of the evil: a solution not indeed financial or economic, but terribly real, as being ordered by God Himself.

IV.

Who has not read the "Encyclical on The Condition of Labor"; a teaching so real, that, if the world would adopt its principles, there would be an end of the reason of being of socialism? While reading that "Encyclical," we must all of us have become convinced that society has gone wrong upon first principles; that society is wrongly educated from the nursery up to maturity; and that the grand fallacy of the education of modern times is that it does not educate the heart, only the intellect. Beginning in the early school days, boys are educated mechanically, while their hearts are treated as weaknesses of the human system. Indeed, to suppress heart, to quench the most refined aspirations of what we commonly understand by the "soul," is represented as being essential to the business career—which means getting all you can in the quickest way. In what ordinary school, public or private; in what university—we might also ask, in how many homes—is the growth of the deeper nature put before the youthful pupil as anterior to the growth of mere talent? Our socialist friends, whom we quoted just now, as rallying their betters on their inferiority,

were, alas, fully justified in what they said. Material greed, animal pleasure, selfish indulgences—with even an industry designed mainly to secure "the means"—are the aspirations, or rather the abuses, of that intelligence which is supposed to set the example to all inferiors. Whatever nonsense the socialists may talk about social equality, they have no reason to emulate any moral equality with those who enjoy material prosperity. However fatuous the plea that men who have not worked hard at inventions—devoting years, health, and strength to their perfecting-have the right to share as much in their benefits as though their brains and their toil has perfected them, it is nevertheless true that a man, once successful, lives principally for the enjoyment of his own success. His socialism becomes limited to agreeable dinner parties, with occasional cheques for coal and blankets for the poor. "Good society" is the real circumference of his socialism, when bad society does not happen to be more to his taste. Now, it is certain that we are all of us socialists in some senses, whether it be by nature or by grace; by the instinct of natural fellowship, natural amenity, or by the promptings of divine charity within the soul. A Christian family is an ideal of pure socialism. For, socialism, in Catholic sense, would mean nothing more than the affectionate tnterest which should animate the whole Family of God. And the fictitious socialism which is now rampant over half the world is solely the result of the world's ignoring the Christian unity for which our Lord prayed so earnestly before His Passion. Modern socialism is a chastisement for a world's selfishness. As Father Cathrein has well observed: "It is only the bond of Christian sentiment, of mutual love and reverence between rich and poor, high and low, which can bring about reconciliation of the social conflicts of our time." And is there any hope of such a beautiful reconciliation? None whatever. Liberalism, in the odious sense of a dull antitheism, has appropriated the schools and colleges of most of the nations; and since it is by education, primarily, that the Catholic Church must teach the hearts—the world caring only to teach the heads-the surest of all means of "reconciliation" is taken away. If the Church had its Catholic freedom in every land, with a monopoly of schools, colleges, and universities, socialism in the modern sense could not exist; both because it would be metaphysically absurd, and because the incentives to wrath and envy would be removed. As it is, the god Mammon rules everything, so that selfishness, materialism, and conventionalism leave no play for our better natures. In England, Protestant England, which for three centuries has been teaching the Catholic Church, the barriers between the rich classes and the poor classes are so adamantine as to be absolutely impassable. By destroying all idea of the Christian family, Protestantism has split up society into units;

so that outside the immediate coterie of one's acquaintance the whole of the rest of the world is alien. It naturally follows that masters treat their servants with less regard than they treat their horses. The brutish manners of most "superiors" to their "inferiors"—two words which signify "employers" and employed" are partly the result of a deterioration in refinement brought on by three centuries of Protestantism. Other countries, Catholic countries, have caught the infection of this vulgar modernism; and although too logical to become Protestant, they are sufficiently worldly to become vulgar, and to regard selfishness as the primary condition of prosperity. So it comes to pass that companies and commercial firms, and managing directors kill their servants with over-work and under-pay; adoring the supreme god, dividend, and correspondingly disesteeming the souls, intellects, and bodies of those who spend their lives in creating it. Hence the spirit of discontent, which the sense of life-long indignity, plus a contempt for the supercilious emptiness of most "superiors," naturally engenders in every honest manly nature. Socialism is not a science, it is a protest. Not one socialist in a hundred knows or cares about value-theories, or about the difference, say, between collectivism and chartism. Not one socialist in a hundred could listen. without being bored, to an academic discussion by a grave thinker on a single point of economics. The science of socialism may be understood by shrewd demagogues, but the masses do not understand it, and do not want to. Their socialism is from the heart, and it is very angry. It does not reason; it rebels, even hates; for the pride and selfishness of their superiors have fomented it. And therefore as this socialism is bred solely of discontent; and this discontent is bred solely of worldly selfishness; it follows necessarily that we must first remove the cause, before we can even begin to hope to remove the effect. The Catholic solution, therefore, is to try to remove the cause. It is to try to get back the human family to that ideal charity and simplicity which were characteristic of the first ages of Christianity. "Utopian," you will exclaim, "more Utopian than the wildest dreams of the wildest socialists!" Let this be granted, and what are the alternatives we have to choose from? On the one side, the nearer men approach to the Catholic ideal, the further they will necessarily get from rabid socialism. On the other side, the further men will get from the Catholic ideal, the nearer they will necessarily get to that utter destructiveness which we apprehend by that dread word, revolution. And since the solution is at least possible, though frightfully difficult; and the revolution is closely impending, though infinitely horrible, the Catholic Church says to the whole world, " Try Me first!" ARTHUR F. MARSHALL.

UNIVERSITY EXTENSION OF CATHOLIC SUMMER SCHOOL.

NIVERSITY extension is revolutionizing modern university education. It is taking deep root in every land throughout the civilized world. In England, where it had its cradle, it is making wonderful headway. France, Belgium, Italy and Germany have caught the inspiration, and in the New World the seeds of its future have been sown in the cities of Philadelphia, Boston, Brooklyn, New Orleans, St. Louis and New York.

I would not have my readers think for a moment that university extension can ever take the place of a university education in the proper sense of the word. We all admit that for the proper apprehending of facts and their relations a long course of academic and college learning is absolutely necessary. tion is the result of time as well as effort. You cannot secure culture and training within a brief period of time, no matter how great the effort the individual may put forth. It takes time to educate the human being—it takes time to educate and discipline along moral and æsthetic, as well as intellectual lines. culture can only come after years of religious training. movement reverses the old way. It takes the teacher to the student instead of bringing the student to the teacher for a term of years. It proposes to provide the means of higher education for persons of all classes of both sexes engaged in the regular occupation of life.

The most essential requisites for the successful pursuit of this course are thoughtfulness of mind and an ardent desire for self-improvement. It is, in fact, an attempt to solve the problem of how much of what the universities do for their own students can be done for a person unable to make a university course—or according to Richard G. Moulton, of Cambridge University—"University extension means university education for the whole nation organized upon itinerant lines." Mr. Moulton makes the distinction that "school education belongs to young people, university education to adults; school education is, in the nature of things compulsory—it is administered under discipline; university education is voluntary. School education, in the nature of things, is limited, but university education is unlimited. It is not only unlimited in its range, but it has no limit of age; it belongs to a man's whole life." In England the general plan pursued has com-

bined courses of lectures, with classes formed from the audiences, for further study and research, under the directions of the lecturer. The English have also included some study and correspondence classes—thus bringing the college or university to those who could not come to the college or university—and by this means creating in the people at large an earnest desire for higher mental culture.

To New York State belong the credit and distinction of being the first State in the modern world to give its legislative support to the university extension system and provide for its official supervision by placing it under the care and patronage of the university of the State of New York. In the world's history few laws have been conceived in a higher spirit. It does not seek to plant education in certain favored spots to which the few may resort who are able to seek knowledge at points remote from home, but it means that all living in its broad territory may be the beneficiaries. It gives to every individual in the State the opportunity to pursue studies congenial to his taste, under the direction of trained teachers. Its success in the extension department during its short existence is an evidence that this new undertaktaking is here to stay. It is a step in keeping with the age in which we live-an age of material and intellectual progress. As in political matters every adult enjoys the privilege of living within the Constitution, so according to this extension scheme every adult person of the Empire State has the right to be within the university in the sense in which it has been defined. Therefore every ambitious adult will have an opportunity of securing additional knowledge in proportion to his attainments. All cannot profit alike, as all are not alike gifted or educated-some have ten talents, others only one-but in this movement all may enjoy the opportunity, if they so desire, of drinking from the stream of knowledge which flows from this mountain-top of our educational institutions. What we Catholics have to do is to see that the water of this great mountain stream is pure, and that its sources are not poisoned.

The extension courses of study may be arranged to suit the various demands of particular localities. Of necessity it must be made elastic so as to reach the various classes of people found in every community. As in our churches if we wish to be successful, we try to make ourselves clearly understood by our miscellaneous congregations, so in this educational movement we must be prepared to meet the various degrees of intelligence. Right here we find the great advantage of this movement—an advantage that we Catholics should not ignore. As our colleges and academies derive strength from their affiliation with any central system of supervision, so may our educational unions, our multiplied reading

circles, our numerous literary societies, be greatly aided and strengthened in their work, provided they have some similar direction and supervision. For the present we might utilize existing institutions and thus reap a rich harvest throughout the country. Wherever university extension exists, if we so request, we may have the privilege of lecture courses delivered by our most eminent lay and clerical educators under the direction and guidance of the central organization. To secure this privilege we have simply to place upon the extension list the names of our prominent writers, educators and lecturers. From this list cities and villages throughout the State, with large Catholic populations, may select their own lecture courses. It is evident that such an agency in all our large cities would be productive of great good. It would help to create public opinion on all the leading questions of the day. It would be a powerful means of breaking down prejudice, as through the extension movement, conducted on Catholic lines, our separated brethren would be more or less brought in contact with us, and would soon learn to hold us and our religion in greater respect and esteem. We could meet them in the lecture hall or in the extension class, and there would be no danger of loss of faith through the misrepresentation of our holy religion or the mis-stating of our position upon the burning questions of the hour, as our Catholic lecturers would be fully equipped to refute all false statements and erroneous principles.

How may we Catholics make this movement a success? We may learn much from those who are already in the field. I have availed myself of the privilege of obtaining from the Regent's Office, in Albany, extracts from private correspondence on this subject. I find that during the past year the lecture courses and classes conducted under the direction of the Regents in the State or New York have been successful, as the following extracts evidence:

Mr. A. O. Gallup writes: "The principal work of the year has been the arousing of interest in extension throughout the State. A regular department of university extension has been formed by the University of the State of New York, printed matter has been distributed, meetings have been addressed in various parts of the State and the movement seems to be rapidly gaining ground. The following abstracts are from reports made by various centres at the close of the year:

Yonkers.—"The response and sympathy which the work here met with was highly gratifying. The general character and standing of the work were likewise. The interest in general was marked, and our managers feel well repaid for their labors. The effect on the community cannot but be elevating. Our experience

was that the sale of tickets, though placed at only one dollar for the course of ten lectures, more than paid expenses. The audiences of the first course numbered from three to four hundred. One step at a time has led us through, and we feel that nothing of the kind has ever been attempted in Yonkers which has accomplished so much at so little cost. The influence on individuals and community has been so stimulating that we desire to carry forward the same work next year."

Rochester.—" The university extension work has been a pronounced success. We opened our lecture course on English literature with about eight hundred in the audience, of whom more than half have indicated a desire to become students. Three-fourths of our audience were wage-earners. Both courses have been of great value to those attending. We shall continue our course and add to our subjects."

Ballston.—"We had our first lecture on January 23d. We had no meeting previous to that, as the organization was effected by personal visits. The course of lectures decided upon was on the History of English Literature. The most valuable result of the movement seems to be that people have become dissatisfied with their present knowledge, and are eager to go on with the work. We had thirty-seven regular members, fourteen of whom were school teachers, two lawyers, one banker, one merchant, one stenographer. the remaining being mostly ladies of leisure. Next year, we propose to put forth a great effort to reach the people in the mills and shops. Five students took the paper work, four of whom continued through the course. They all consider it by far the most valuable part of the work. The work was presented to us much as a college professor gives it to his students. Some, I think were disappointed because they expected more of an entertainment, but, in general, every one was pleased, and at the close of the last lecture there was a unanimous desire to have the centre reorganized for another year. The books loaned us by the department were of great use to us. We kept them until June 23d, and they were used all the time. This part of the work seems as valuable as any to towns where there are no literary privileges."

Binghamton.—"The Binghamton centre was organized in March, 1892. For its first course it enlisted 113 members—57 ladies, 56 gentlemen. Its membership was distributed as follows: three ministers, twenty-three teachers, two physicans, one dentist, four lawyers, three laborers, fourteen merchants, one manufacturer—the remainder being mostly people of leisure. The active membership, at \$5 a year, was the basis of our financial scheme. We made 100 active members our objective from the start. To pledge that number delayed our opening several weeks, but we felt justified in

securing the financial safety first. During our canvass we secured two fellowships at \$20. Political economy was chosen for our first course, followed by American Revolution, and Art History. Our centre has gained a measure of success because we enlisted at the beginning some good workers, who believed in university extension for Binghamton. They did and are doing much hard work without expectation of personal reward. They met with little encouragement at first. Eight of our members took the examination at the close of the first course. Over thirty signified their intention of doing so, but a severe storm and a necessary post-ponement of a week deterred the majority."

Watertown.—" Interest in our university extension was first aroused by means of circulation of literature on the subject, and then by a public meeting. After the centre had been formed, and the necessary financial security had been obtained, it was decided that the first course of lectures should be on American History. . . . , The course was, from the start, a pronounced success. It is not too much to say that the 250 who were in attendance as students appreciated fully the value of this method of instruction, as evinced by the regular attendance, their close attention to the speaker, and their thoughtful questions at the lecture review. many, the study of the American Revolution came in a new way, so that our first struggle as a nation was to us not only a revolution but a revelation. I think that I am not incorrect in saying that as a result of the course, a long talked-of scheme for a public library was agitated anew, and steps taken for its consummation. It should be some indication of the general interest that two courses were voted for next year."

Albion.—" The university work at Albion has been a success from the start. We first secured a guarantee fund of \$200, and then notified your department and organized. The town was thoroughly canvassed, and a good number of tickets sold. classes were interested, and we started with over 200 at the first lecture. We sold course tickets for the ten lectures for \$2, and a single ticket for 30 cents, our total receipts being \$430. We propose to carry on the work next winter. The average attendance was 240; the number of students, 150; number doing paper-work, 50; number who took the examination, 27; 18 received certificates. Our circulating library belongs to the Union School, and is open only on Tuesdays and Saturdays. The demand for books was such that we decided to keep the library open every day and evening, except Monday evening, the night of the lecture, and Sundays. The school board added such books on American History as we needed, and the number of books drawn increased ten-fold, and has kept up since the course closed. The board had added \$800 worth of books, and we are now cataloguing the library by the Dewey system. The value of the university extension course, both to those who attended the lectures, and to the community at large, has been very great, as you can readily see from the above. People from the country, five miles distant, attended the whole course, and some of them were among those who took the examination and received certificates with honor. The demand now is, for more than one course. English literature is called for by the literary class, and American history by the general public. We must take care, however, and not undertake too much in a place no larger than Albion, which has about five thousand inhabitants. We have finally decided to have a four-page paper on general topics, with one page headed "Educational," and we can devote as much space as desired to university extension and kindred subjects."

Albany.—" Interest in university extension in Albany existed in a latent way for some time prior to the date of the first public meeting on the subject. At that meeting, however, steps were taken to organize an extension centre, and the work since that time has been a pronounced success. The managers of the centre hoped for an attendance of one hundred at our first course of lectures, but hardly dared expect more than fifty. On the evening of the first lecture there were nearly four hundred persons present; and the average during the course has been over three hundred. The course of lectures was on political economy, by Prof. Jenks, of Cornell. The value of the course is best indicated, perhaps, by the faithful attendance of the members of the class, and the deep interest which was evinced by them in the subject. The records in our office will show that twenty of the class have tried the examination. In my mind, the most valuable part of the university extension system is the discussion held before each lecture. The average attendance at these discussions was about one hundred. Our Students' Club has just started, and we shall have, without doubt, at the beginning a membership of over twentyfive earnest students. We have arranged for courses in history and literature for next year, and are assured that there will be an attendance of at least five hundred. We think that university education has come to Albany to stay."

These reports from centres of extension activity will enable us to form an intelligent idea of how the movement may be made successful from a Catholic standpoint. We can apply the principles and utilize existing institutions. Advantages similar to those granted us in New York State might be obtained in other regions through a properly directed missionary spirit of our prominent laity and clergy. What people feel strongly they express strongly.

We see this every day in religion and politics. Men and women leave home and family and friends and everything that is dear in life to labor for the salvation of souls—often regardless of life itself. Political parties exhaust their resources and wait for long weary years to secure their prize. Why should it not be so in educational matters?

The time may come when all this work that is now being accomplished by individual effort may be stimulated by some grand central organization such as the Catholic University at Washington aided by the leading educational institutions of the country, or the Catholic Summer School if it should prove to be a success. Then our reading circles, our Catholic extension courses, our educational union—in fact our parochial schools, academies and colleges—all would receive new life and stimulus from some such central bureau of direction. But until such a happy boon comes we must be satisfied with individual effort, and by every legitimate means we must prepare the way by drawing into active work our prominent Catholic laity. Catholics, too, who never had the advantage of a thorough education or who have never fully grasped the principles of Catholic philosophy, or who through association with persons not of our faith become cold and indifferent. would by such a course of instruction be much benefited. Many of them would hear for the first time the refutation of silly fabrications, that though of themselves no argument against Holy Mother Church, vet because of their silly reiteration often make weak-kneed Catholics ashamed of their religion. The honest seekers of truth outside of the Catholic church would also be greatly benefited. In every city, in every village, in every hamlet, are to be found men and women, earnest souls who are groping in darkness, eager and anxious to know the truth. The Catholic university extension scheme would be for such a great blessing. Unfortunately we Catholics are not thoughtful enough of this class of people. We are born in the faith, we are nurtured in the light and we are taught the truth of our holy religion from the cradle to the grave, whereas most of our separated brethren have never had the opportunity of knowing the truth or seeing the light. They have ears and they hear not, they have eyes and they see not. From their very infancy they have been taught to look upon Mother Church as the enemy of progress and enlightenment—a corrupt and superstitious institution that should scarcely be tolerated. From their catechism, from their Sunday-school teachers, from their home library, from their pulpit, from their religious press, they have learned to shun Catholics and to keep themselves aloof from them. They fear a Catholic as a child would fear a hobgoblin or a bluebeard, and the reason for all this they know not. But thank God

this condition of things is being changed. Our separated brethren think more kindly of us and look more kindly upon us—and when they want to know the truths of our holy faith or the practices of Mother Church they no longer seek information from biased and prejudiced minds. They are now willing to go to the fountain head from which they may learn the truth.

This is what our Catholic Summer School has been doing during its short existence and what it proposes to do in the future. It is the university extension on Catholic lines. Its session at New London last summer exceeded the brightest expectations of its founders, and convinced them that much good might be accomplished by its continuance. The large attendance, the complimentary press notices from writers of all shades of opinions, and the interest awakened in every portion of the English-speaking world seemed to demand its permanent establishment. The community at large has shown the deepest interest in the movement as one of the most advanced that has yet been made by the Catholics of the United States. The general council has been invited to examine beautiful sites for the permanent location of the school and most liberal concessions have been offered in case of acceptance. These bona fide offers express more than a business enterprise. They evidence the high opinion held by the American people of the success of their Catholic brethren in educational work. What could speak more forcibly than the following extracts from a letter received by the writer from Mr. Melville Dewey, one of the Regents of the State of New York. The question of permanent location within the limits of the State is touched upon in the following manner:

"The success of the new enterprise being assured by your experiments at New London, the most important question regarding the future is its permanent location. Those who are familiar with this kind of work will recognize that however desirable it may be to go from place to place with brief annual conventions and similar meetings, such a course would be most unfortunate for an educational institution like the Catholic Summer School. To accomplish the best results it must be fitted to its environment, it must have considerable local equipment. Every year adds something of value, which is retained permanently. Arrangements for transportation, for board and hotel accommodations, and chiefly suitable halls and educational appliances, and provisions for recreation as well as study are worked out and improved year by year in a permanent home, in a way utterly impossible if a new location is taken each year.

"In choosing this permanent home the authorities must consider geographical location, natural attractions, the charter that can be secured, the laws to which the school must be formed and the powers and privileges granted. I believe that under every head the State of New York offers advantages over every competitor and in addition to this I am told that it happens that the warmest friends of the school and those who have offered the largest pecuniary inducements are from New York.

"Its natural attractions in climate, healthfulness, grand, picturesque or beautiful scenery, are unexcelled. It has the Adirondacks and the Catskills, the St. Lawrence and the Hudson, and a score of small but most attractive rivers; Lakes Ontario, Erie, Champlain, George, and through its centre a long series of smaller lakes which are famous for their beauty. If any prefer the cities or towns for such a school no other State boasts so many cities or so great suburban attractions.

"The strongest claim of New York, however, is its peculiar laws pertaining to higher education. The last legislation on this subject was ch. 378 to the university law, which is recognized by all as the most satisfactory higher educational legislation vet enacted. It protects and fosters such institutions as in no other State. New York alone has a distinct department in the university of the State devoted entirely to the interests of higher education; it alone has a university extension department whose officials give their entire time to advancing the interests of education carried on outside the ordinary schools and colleges, the very education which the Catholic Summer School represents. The charters granted by the regents of the university are more desirable in the powers and privileges given than those granted by the legislature of any other State. The great State library and State museum at Albany are able under the new laws to be of invaluable service to such institutions as the Summer School. New York is also the home of the Chautauqua system, which has not only a national but an international influence, and obviously there would be practical advantage in having the national Catholic institution located in the same State where it could share in every privilege granted to the older institution as a result of its fifteen years of earnest work and steady development.

Any one who doubts the validity of these strong claims for the Empire State will be convinced if he will carefully study the new university law and the working of the university departments, or if he will consult any expert educator, whether in New York or elsewhere, who has himself investigated the matter. Hundreds have made this comparison, and so far no one has for a moment questioned that New York offered to higher educational institutions the most desirable location on the continent.

It remains, therefore, for the originators and the promoters of

this great undertaking to continue the good work on a broad and a safe basis. The leading minds among the clergy and the laity must be brought into the organization so that the institution may be in every sense representative. The culture and the wealth of our best Catholics must be united in its very inception. The methods of Chautauqua and of the hundred other summer schools that are to be found among our separated brethren are not to be ignored. They have in them a lesson for us. They are useful institutions, and from their point of view they are doing much good. The committee from the general council of the Catholic summer school that visited Chautauqua last August were highly pleased with the manner in which this school was conducted. They found 8000 earnest students, from every walk of life, pursuing studies under the best teachers that could be procured.

As our Catholic laity become more numerous and acquire more wealth they will demand an educational institution of this kind. Year after year they seek rest and recreation in greater numbers. and why should they not enjoy at the same time the intellectual entertainment now enjoyed by their neighbors? It will stimulate study and good reading among our Catholic people, and will mark a new era in the history of the Catholic Church of America. is opportune, because the whole literary world has undertaken the revision of history, and such revision is always a gain to the Church. The fog of misrepresentation and prejudice that has enveloped her history is being cleared away by our Catholic scholars who have been stimulated in every portion of the globe by the efforts in this direction of our Holy Father Leo XIII. A taste for Catholic literature will be fostered throughout the land, and our Catholic authors will be encouraged to devote their talents to the writing of Catholic books, as this movement will stimulate a taste in the people for good, sound reading. Such are a few of the advantages of university extension as carried out by our Catholic summer school.

University extension, then, whether we consider it in the reading circle, the lecture course, with its correspondence classes, or the Catholic summer school, is the bringing of the university to the people when the people are unable to go to the university. With the spread of this movement the privileges of knowledge shall be no longer for those alone able to satisfy the conditions of academic residence; no longer for those alone who can go through years of careful preparation and devote additional years to the sole occupation of study.

J. F. MULLANEY.

EDUCATION IN ANCIENT EGYPT.

O the brute animal nature makes a free gift of its intellectual outfit, if we may use the term. From birth instinct guides it in all its doings. Instinct points out to animals their food and their habitation, their dangers and their means of protection, their friends and their enemies; it directs them in their wanderings and migrations, in their social and political organization. Man, on the contrary, is not only born helpless and ignorant, but for the development of his physical and intellectual powers he is dependent on others. Instinct, it is true, teaches the infant to suckle and to make the first rudimentary efforts at using its senses. But beyond these first efforts the child learns as it is taught. Its parents teach the child what to eat, what to avoid, what is useful, what is dangerous, who are its friends, who its enemies. Only after a lapse of time does the baby know its mother and father, and then only because he is taught who they are. In short, most of the knowledge which instinct teaches brutes comes to man from without. Animals do not-probably cannot-educate their young; man must educate his offspring—a distinction suggesting by itself an essential difference in the intellectual constitution of man and animal.

Education, therefore, is one of man's necessities. Even the lowest savage must educate his children after his fashion. He teaches them the use of their hands and their feet, of their eyes and their ears. He teaches them to run and to leap, to climb and to swim. He instructs them in the use of the bow and the spear, the club and the tomahawk. He discloses to them the mysteries of the chase, and initiates them into the stratagems of war. He teaches them love and respect for their parents, obedience to the chief, bravery, cunning, order and industry. The mother, in her lullabys, instructs her child in the simple rudiments of music, and in her nursery tales teaches them the elements of her own conceptions of morality and her notions of a supernatural world, imperfect though these may be. It would be a waste of time to enter into further detail. Suffice it to say that education is coeval with humanity.

It is not our purpose, however, to describe the elementary home education of the savage, interesting as the task might be. Our purpose is to place before our readers a brief picture of what education was among the Egyptians, probably the oldest civilized nation of the world. By education here, we mean substantially

school education, the training of children and youth in reading, writing, arithmetic, and whatever other branches they may study to fit them for their life-work. It seems to follow, hence, that the invention of writing is a prerequisite to school education. And still we would not lay this down as an absolute rule. History acquaints us with nations which, without the use of writing, achieved no little progress in geography, astronomy, and elementary physics, not to speak of their philosophical and religious speculations. Cæsar¹ tells us that that the Celts of Gaul and Britain had their Druidic schools in which writing was absolutely forbidden, though they used the Greek alphabet in business affairs, both public and private. The Greek letters the Celts received from the Greek colony of Marseilles, which was founded in the sixth century before Christ. It is a safe inference that Druidic learning must date back to the time prior to the settlement of Marseilles; no people in possession of the art of writing would be wrongheaded enough to pursue its studies, and especially its higher studies, without the aid of that art. Now, the Druids, Cæsar tells us. taught their scholars a great number of verses; so great that it sometimes took twenty years to master them. In these versesthey set forth their teaching on the constellations, on the motion of the stars, on the size of the earth, and of various lands on the earth, on the power of the gods as evidenced in their action inphysical nature, on their moral authority. Lastly, they taught the transmigration of souls, or, as Roget de Belloquet² interprets the passage, the immortality of the soul. The Gauls, therefore, cannot be truly said to have been without school education, though all this scientific progress was made without the use of writing.

However, here as in many other cases, the exception proves the rule, and the rule is that school education presupposes the invention of writing. Conversely it is safe to say that usually the invention of writing leads to the establishment of schools. We may therefore, look for the earliest schools among the Egyptians and Babylonians. Both these nations, were in possession of the art of writing, even at the time when history first introduced them to us. How far back their history goes, our present knowledge does not enable us to determine. Their chronology is so uncertain that all dates prior to the sixteenth century before Christ are little more than guesses. In studying the history of Egyptian education, therefore, dates mean little more than that one period precedes or follows another. The number of years before Christ of any dynasty or event in the early history of Egypt, may be incorrect by twenty or a hundred, or a thousand years, for the best Egyptologists some-

¹ Cæsar, De Bello Gallico, vi., 14.

² Ethnogènie Gauloise.

times vary to this extent in their systems of chronology. Having made this remark by way of caution to the reader, let us proceed to study the history of education on the banks of the Nile

Since the decipherment of the hieroglyphics, our knowledge of Egyptian history is based mainly on what the monuments and papyri found in Egypt by thousands, have revealed to us. These have thrown even more light on the life and manners of the inhabitants of the Nile Valley, than on their political fortunes. Happily the researches of the learned have not been unproductive of fruit in the field of education. Among the papyri that have been translated, are school books, school exercises, corrections of exercises by teachers, a collection of arithmetical and geometrical problems, besides incidental statements, elucidating the methods and progress of education in Egypt. If to these be added the reports of Greek writers, from Herodotus to the Fathers of the Church, we have a rich mine of information on this interesting subject.

The Egyptians had both elementary and higher schools. In a country where even in relatively early times hundreds of monuments were covered with lengthy inscriptions, reading must have been a common accomplishment; otherwise, why the inscriptions? Indeed we know that the temple of On or Heliopolis, the sages and teachers of whose school were extolled by all antiquity, was built by Osortasen I.1 of the Twelfth Dynasty, the first of the Middle Empire. Temple schools, equally famous and perhaps more ancient, existed at Memphis and Thebes, while institutions of less importance, were found in the larger cities of the kingdom. But these temple schools were not, strictly speaking, elementary schools. They included an elementary course, but their fame was based on the excellence with which they taught the higher studies. But there was also elementary schools in the proper sense of the word. Maspéro² tells us that there were district or ward schools in the large cities. Plato (B.C. 400) who had visited Egypt informs us that every child in Egypt learned the alphabet, i.e., to read and write and also to cipher,3 a statement which implies the existence of elementary schools for the body of the people. An inscription of the reign of the Persian King Darius (B.C. 50c), to whom Egypt was subject, also proves this. Uza-hor-enpiris states: "King Darius bade me to go to Egypt to restore the schools of the hierogrammatists (the temple schools). I did as his



According to Egyptologists, the old empire extends from the first to the twelfth dynasty; the middle empire from the twelfth to the twentieth dynasty, and the new empire from the twentieth to the thirty first. The beginning of the twelfth dynasty is variously set down at from 2268 to 3703 B.C.; the beginning of the twentieth dynasty at from 1022 to 1293 B.C.

² Maspéro's Egypten and Assyrian, p. 9.

³ Plato, *Laws*, vii., p. 819 B.

majesty ordered. I selected from their schools the children of the people. I gave them to a skilful teacher to instruct them in all kinds of work. I provided all who distinguished themselves with everything needful for scribeship according to their progress.1" But in all probability, the Egyptian elementary schools are as old as the new empire (about 1100 B.C.), when demotic writing makes its appearance. As we have said above, these schools were found in the various districts of every large city. Thither the Egyptian boy was sent after he had reached the age of six or eight. He was dressed in the airiest of garments, a bracelet on his arm and an amulet around his neck, and perhaps a girdle. This was the scholar's uniform until he reached puberty. Girls apparently were not sent to school, though otherwise the lot of the Egyptian woman was far pleasanter than that of her Asiatic, nay even of her Greek sisters. Indeed there was little time to send them to school. for often they were mothers when they reached fourteen. Meantime they must have learned the mysteries of housekeeping, cooking, sewing, spinning, weaving. The daughters of the wealthy may have had private tuition; surely the queens regnant of Egypt, whom we meet with as early as the Third Dynasty, must have had a good literary education to fit them for the throne. But to come back to our school-boy. In school he was first taught to read. But to read Egyptian was no simple matter. Instead of our twentysix letters the Egyptians had several hundred signs. Some of these stood for single letters, some for syllables, some for whole words. Sometimes one sign had several values (polyphones); sometimes different signs had the same value (homophones.) Lastly certain signs were not to be read at all; they served to indicate in what sense the word before which they stood was to be taken. The Egyptian student had a difficult task before him, when he began his reading lessons. The writing taught in the primary school was the demotic. It was a simplification of the hieratic, which in turn was a simplification of the original hieroglyphs. The demotic had discarded many useless symbols and being written on papyrus, not chiselled into stone, had become what may be termed a running script. The Egyptian school-boy, however, did not write on papyrus. It was too dear to be wasted. The copy was set for him on a wooden tablet or on a slate. He himself used a thin wooden tablet, covered with white or red stucco. He wrote with a reed or painted with a brush. In the British Museum there are several of these school-boy tablets, interesting mementos of Egyptian education. In the Abbot Museum also, now in the collec-

¹ Schmidt, Geschicte der Pædagogik, i., 209. The references are to the last edition edited by Hannak.

tions of the New York Historical Society, there is a similar tablet of the age of the Ptolemies, from the tomb of a Greek teacher.¹ When the boy had made reasonable progress, he was permitted to write with black or red ink on papyrus.

The Egyptian schoolboy next wrestled with arithmetic. As early as the time of the Hyksos the foreign kings that ruled Egypt, when Joseph was sold to Potiphar, the Egyptians had a decimal system of notation, with symbols for 10, 100, 1000, up to 1,000,000. The monuments show that in common life they ciphered with the aid of the fingers. For the same purpose they used little stones also, we are told by Herodotus (about 450 B.C.), who travelled in Egypt. The Greek historian's statement is confirmed by an Egyptian papyrus of the time of Memephthat I. (about 1400 B.C.). This points to the use of the abacus, or computing board, so well known to the Greeks and Romans, and, in fact, still used in Russia and the schools of Germany. Plato was greatly struck by a method of teaching arithmetic, which he describes as follows:

"In Egypt systems of calculation have been actually invented for the use of children, which they learn as a pleasure and an amusement. They have to distribute apples and garlands, adapting the same number either to a larger or less number of persons, and they distribute pugilists and wrestlers, as they follow one another, or pair together by lot. Another mode of amusing them is by taking vessels of gold and brass and silver and the like and mingling them, or distributing them without mingling; as I was saying, they adapt to their amusement the numbers in common use, and in this way make make more intelligible to their pupils the arrangements and movements of armies and expeditions; and in the management of a household they make people more useful to themselves and more wide awake; again in the measurement of things which have length and breadth and depth, they free us from that ludicrous and disgraceful ignorance of all these things, which is natural to man."1

The passage reads almost like a description of a kindergarten, and we are again impressed with the truth that there is nothing new under the sun. The principle of object teaching, also, is found in the instruction described by Plato. Moreover, from our quotation, it seems to follow that the Egyptian in these elementary schools gained some acquaintance with surveying or the first principles of geometry. How we are to understand this will appear when we shall speak of an Egyptian school book on arithmetic which has come down to us.

¹ Mulhaffy, Old Greek Education, p. 52.

² Plato, Laws, vii., 819, B.; Jewett's Translation, vol. iv., p. 336.

This elementary school course probably lasted for three or four years. We have no information regarding its precise duration. the teachers were scribes, generally well advanced in years. These scribes were men of more than ordinary education. Besides the attainments of the elementary school, they must, at least, have mastered the art of correspondence and the science of accounts. But there were scribes of far deeper learning; the sons of princes and governors, nay, the Pharaoh's own children were proud of being scribes. They did not form a caste, as was formerly supposed. If gifted with unusual talent, the mechanic's boy might aspire to bear the title. The poorest parents, when they found that their son's talents warranted the step, submitted to every sacrifice to enable him to take his place in this honored class. From it came high priests, governors of provinces, architects, engineers, physicians, poets and astronomers. But by no means all scribes were scholars or writers of distinction: the majority of them were little better than correspondents and accountants. pared with the peasants' and mechanics' lot, however, theirs was a prince's life, and when an Egyptian had once reached this proud position, he strove to transmit its advantages to his children. In Egyptian documents we can trace long generations of scribes, and it is this fact, no doubt, that gave rise to the opinion formerly held that the scribes formed a closed caste. To the scribes the schoolmaster also belonged, though it is likely enough that often he was an unsuccessful or superannuated member of the class.

Two roads led to the scribeship—the temple schools and private instruction. The latter calls to mind the way in which the American lawyer was trained, before the rise of our law schools. The candidate for scribeship was placed in the hands of a practising scribe. In the latter's office he received and studied his tasks. But if, for instance, the master was superintending the erection of a house, the pupil accompanied him to the place where the building went on, observed how he kept the accounts of the material delivered and used, and how he gathered the matter of his reports. In the scribe's office the boy spent months in copying letters, circulars, prospectuses and accounts. Of these he understood little or nothing at first; but by degrees he acquired an insight into their meaning and remembered their form. To teach him to write letters and reports in various styles, simple, elegant, or florid, he was made to study and copy the letters or reports of acknowledged masters in the art of composition. Here is the model of a concise report, drawn up by Eumana, a famous scribe of the days of Ramses II. (10th dynasty): "I arrrived at Elephantine and am carrying out my orders. I am taking an account of the mercenary foot soldiers and the charioteers of the temples, as well as of the servants and

sub-officials in the houses of his Majesty's commanders. As I shall report thereon to the Pharaoh (L. H. P.)¹, my work runs on swiftly as the Nile. Do not, therefore, be anxious on my account."² Maspéro also gives us a report written in the florid style. The scholar having copied the model, the master corrects not only his spelling, but also points out defects in the writing. After a lengthy training of this kind, the pupil at last understands the forms of the various kinds of letters, reports, accounts, etc. He has committed to memory select turns of phrase, admired for their elegance, and he is now ready to attempt compositions of his own. Again these are corrected, missing words inserted, errors of spelling and style noted. Having acquired the knowledge and skill needed for everyday use, the young man is a scribe, seeks employment, often ill-paid enough, gets married, and by the time he reaches his twentieth year he is the father of a family.

But it is time to pass to the famous temple schools of Egypt. These included an elementary course, where reading and writing were taught. The scholar learned both simultaneously, as our boys and girls do to-day. Elementary arithmetic was also studied, and at the end of the course the boy underwent an examination before he was admitted to the higher studies. It is interesting to remark that examinations, against which a crusade was started a few years ago by innovating educators and amateurs, have stood a practical test of four thousand years. It may be doubted in all modesty whether the substitutes suggested by modern Solomons will last so long.

Having passed his examination, the youth now took up the higher studies; these lasted till his sixteenth year, as is inferred from an inscription of the first prophet of the god Amon under Ramses II. He tells us that he was four years a child and twelve years a boy. Assuming that he began his studies at six, we conclude that they lasted for ten years. What did he study during this higher course? Reading, writing, and arithmetic formed its basis. But the student learned not only the demotic but also the hieratic and hieroglyphic characters. Reading, too, was carried to greater perfection. Fortunately time has spared some of their readers, if so we may call them. They were made up, not of selected passages, but of entire works, though these were not of great length. Not every boy had a reader during the reading lessons. Writing material was too scarce and written books too dear to allow such profusion. Either the roll of papyrus was

¹ The letters stand for Life, Health, Power (Egyptian, onchu, uza, sobu), and always follow the title Pharaoh.

² Maspéro, Egypten and Assyrian, p. 10.

passed from student to student, or the lesson was first dictated and copied by the boy.

Some of these reading books, we have already said, have been preserved and translated by the Egyptologist. The oldest of these, "The Precepts of Ptah-hotep" is also a part of the oldest book in the world.\(^1\) Ptah-hotep, the author of this work, was governor of Thebes under King Assa of the Fifth Dynasty, and according to the book itself, the first born son of the king. As he was one hundred and ten years old at the time he wrote his "Precepts," and King Assa was still on the throne, there is good reason to take M. Virey's view, that the epithet "son of the king," was only an Oriental exaggeration. The book was written for the purpose of instructing those that came after him in the wisdom of the ancients. It opens with a description of old age, worthy to be set alongside of Juvenal's description, though less repellent.

"Decay falls upon man and decline takes the place of youth. Troubles weigh upon him every day; the sight fails, the ear becomes deaf; his strength passes away without ceasing. The mouth is silent; speech fails him; the mind decays, remembering not the day before. The whole body suffers. That which is good becomes evil; taste completely disappears. Old age makes a man altogether miserable; the nose is stopped up, breathing no more from exhaustion."

We subjoin a few extracts illustrating Egyptian views of morality.

"To throw obstacles in the way of the laws is to open the way to violence. Inspire not men with fear, else God will fight against thee in the same manner. Be active during the term of thy existence, doing more than is commanded. Do not spoil the time of thy activity. He is blameworthy, who makes bad use of his moments.

"If thou art a wise man, bring up a son who shall be pleasing to God. If he conforms his conduct to thy way and occupies himself with thy affairs as is right, do to him all the good thou canst. But if he conducts himself ill, disobeys thy wish, if he rejects all counsel, if his mouth goes according to the evil word, strike him on the mouth in return. If thou art wise, look after thy house; love thy wife without alloy. Fill her stomach, clothe her back, these are the cares to be bestowed on her person. Do not repeat any extravagance of language. Do not listen to it; it has

¹ This is the Papyrus Prisse copied under Amenhemhat of the Twelsth Dynasty now in the National Library at Paris. The first part is a moral treatise written by a certain Kagionni under Snesse, the last king of the Third Dynasty, and therefore older than the pyramids. The last sisten pages contain the *Precepts* of Ptah-hotep, —Maspero, *Histoire de l'Orient*, p. 69.

escaped from a hasty mouth. If it is repeated, look without listening to it, on the ground. If thou hast become great from being little, if thou hast become rich from being poor, when thou art at the head of the city, know how not to take advantage of the fact that thou hast reached the first rank; harden not thy heart because of thy elevation; thou art become only the steward of the good things of God. Put not behind thee the neighbor that is like unto thee; be unto him as a companion. . . . Distinguish the superintendent who directs, from the workman, for manual labor is little honorable, the inaction of the hands is honorable. The son who accepts the instruction of the father, will grow old on that account.1 If the teachers allow themselves to be led towards evil principles, verily the people who understand them not, will speak accordingly, and that being said to those who are docile, will act accordingly. Take not away a word from the ancient teaching and add not one; put not one thing in place of another. 2"

Such are the precepts Ptah-hotep wrote in the oldest book in the world, such the wisdom which according to his own test was to be dispensed by the teachers of Egypt.³ From a very early period, therefore, morals was taught in the Egyptian temple schools, morals based not upon speculation, but upon common sense and experience, and handed down by tradition like a sacred heirloom. How steadily flowed this stream of tradition appears from other papyri, and especially from one 4 written under the Ptolemies, when Egypt for the last time enjoyed a kind of independence. There we read:

"Do not maltreat an inferior and respect the venerable. Do not maltreat thy wife, whose strength is less than thine, but let her find in thee a protector. Do not curse thy master before God.... Do not cause thy infant to suffer if he is weak, but assist him.... Do not play upon those that are dependent upon thee.... Do not go out with a foolish man. Do not stop to listen to his words." ⁶

But manuals of ethics were not the only text-books studied by the temple scholars. We must not pass in silence a short treatise ascribed by Hannak 6 to no less a person than the great Pharaoh Amenemhat I. of the Twelfth Dynasty, but said by Maspéro 7 to be

¹ Compare the Fourth Commandment of the Decalogue.

² Records of the Past, series ii., vol. iii., pp. 16-35.

³ See Records of the Past, ii., 3, p. 31.

Louvre Papyrus, x., 9.

⁵ See Th. Devérix's translations in Records of the Past, series i., p. 159, f.

⁶ Schmidt-Hannak, Geschichte der Pædagogik, i., p. 215.

⁷ Histoire de l' Orient, pp. 96-7. The reader will find the work translated in Records of the Past, 1st series, ii., p. 14.

the work of a contemporaneous scribe. It is a collection of counsels addressed by Amenemhat I. to his son Osortasen I., promising him prosperity if he will take them for his guide, and especially if he will take his father for his model. "I," the old king says to his son, "am a maker of corn, the lover of Nepra (the corn god). He granted me the rising up of the Nile upon the cultivated lands. There was no hungry creature through me, no thirsty creature through me, because all took care to do according to my words, and all my orders increased the love of my people for me."

Another ethical work of great repute is the book of Ani, a scribe who lived during the Ramesside Dynasty (the twentieth, about 1200–1250 B.C.) and wrote sage instructions for his son Khonshotep. Ani's precepts are referred to in the poem on the Praise of learning by Duau-sa-Khaeda, as a text-book of the highest authority used in the temple school of Khennu or Silsilis. We quote some of his maxims because of their strikingly religious spirit. "Be submissive to God. Serve God. Let thine eyes contemplate God's works. He it is that smites, and that we should implore for aid. Pray humbly with a virtuous heart, whose words are quiet and secret, God will bless thy work, hear thy words, accept thy sacrifice. Be not heartless; God gives thee life. Think not ill of others. The traitor makes false charges, but God will make manifest the truth. His falsehood will be brought to light and cause his fall."

It is strange that the Egyptians whose Pharaohs took so much pains to chisel on the hardest of granite endless pictures of their battles and their triumphs, civil and military, and extensive inscriptions celebrating their piety and prowess, who have left us long papyri with lists of dynasties and kings, seem to have had no idea of history, nay not even of chronicle writing. Narratives, formerly regarded as historical, are now pronounced to be romance, by all Egyptian scholars. History therefore had no place in Egyptian education. But the teachers of Thebes and On, who had a keen feeling for style, did not fail to place before their students models of narrative composition. Having no history, they took instead the romances already mentioned, some of which have come down to us and are accessible in translations. We shall mention only two, the "Story of Two Brothers," the initial incident in which greatly resembles the Biblical story of Joseph and Potiphar's wife, and the story of Saneha or Sinouhit. We have clear proof that the latter was used in the temple schools. It is the story of an Egyptian who forced to flee from his country, like Moses, takes refuge with a petty Edomite chief. He marries the Bedouin's

¹ Schmidt-Hannak, Geschichte der Pædagogik, i., p. 236,

daughter, and rises to great wealth and influence. But an Egyptian knew and loved but one country, the land of the holy Nile. So wealth, security, power in Edom did not satisfy the heart of Saneha. He obtains his father-in-law's consent and returns to Egypt. The Pharaoh (Amenhemat I. of the Twelfth Dynasty) receives him into favor, and the rest of the tale is the story of his success and honor in the beloved land of his birth.1 The romance we see, was well fitted to stir feelings of patriotism in the youthful Egyptian. To this, no doubt, as well as to the elegance of its narrative style, it owed the honor of being chosen to be a school classic. Poetic literature also was cultivated in the Egyptian schools. The foremost place in the poetic literature of Egypt was held by its lyric poetry, which consists chiefly of hymns. Famous among these was a hymn to the Nile, written by the scribe Ennanna, the author of the "Story of the Two Brothers." Ennanna flourished under Ramses II. (1300-1400 B.C.). We subjoin the first of its fourteen verses.

Adoration to the Nile l
Hail to thee, O Nile!
Who manifested thyself over this land
And comes to give life to Egypt!
Mysterious is thy coming forth from the darkness,
On this day whereon we celebrate it,
Watering the orchards created by Ra (the sun God)
To cause all cattle to live,
Thou givest the earth to drink, inexhaustible one.
Path that comest down from heaven
Loving the bread of Seb and the first fruits of Nepra,
Thou makest the workshops of Ptah to prosper.²

Another hymn is addressed to the ibis-headed Thoth, the god of wisdom and the inventor of writing and other arts. Hannak thinks it may have been used in the temple schools as a prayer, though this opinion is based wholly on the text of the hymn. Here it is: "Come venerable Ibis, God, protector of Sasûnnû (Heliopolis magna), scribe of the great gods, in Unna come to me! guide me! give me experience by bestowing on me thy merits! Thy merits excel those of others; who possesses them and is skillful therein, receives an office. My many works, thou madest them. The masterpieces that are mighty and great, thou madest them. Thou preparest the way for what is not yet. Sait and Renent (the two creative principles) are with thee. Come to me; guide me, I am the servant of thy sanctuary. Let me speak with thy powers I say, and all say with me! Men's institutions and

¹ Records of the Past, i., 6, pp. 131-150. See also Maspero, Histoire de l'Orient, pp 98, 102 ff., and Godwin in Fraser's Magazine, 1865, p. 185-202.

² Records of the Past, 2d series, iii., p. 48. The translation is by P. Guieysse.

their greatness, Thoth made them. Men come and bring their children, to fill them with zeal for thee. Thy merits exceed all merits. Power, strength and joy to him who possesses them.

Next to these hymns didactic poetry was cultivated in the schools. We have already mentioned the poem on the Praise of Learning. It is a poem venerable for its antiquity, dating back to the twelfth dynasty (2300-3400 B. C.). Birch thinks that it may even be as old as the sixth dynasty (2700-4300 B. C.). Its author was a man whose name is read Inauf-sa-Khrat by Birch and Duanse-Kharda by Hannak. He was about to place his son Pepi at the temple school at Khennu or Silsilis, and addresses to him a poem of some ten pages, in which he excites the youth to the pursuit of letters by depicting for him the miseries of other occupations. "I have seen violence," he begins, "I have seen violence, therefore give thy heart to letters. I have seen those who labor with the hand; there is nothing beyond letters. As men dive into water, do thou plunge into the book of Ani. When I took thee to Khennu it was surely through affection for thee; a single day gained in school is gained for eternity. What is done in school is lasting as the hills. That I bid you learn quickly, bid you love, for it removes enemies." The pictures of the mechanic's life drawn by the old sage are sometimes more forcible than elegant. Who would be a blacksmith when he reads "I have seen the blacksmith at his work at the mouth of his furnace, his fingers hard like the crocodile's skin; he stinks worse than the eggs of fish." The dyer is equally deserving of pity. "The dyer's fingers stink with the smell of bad fish. His two eyes are weary with every fatigue, his hand stops not, he watches the rent of the old garment, an abomination to him are clothes." It would be an injustice to pass over the barber, though he does not fare quite so ill. "The barber shaves till night; when he eats he places himself on his elbow. He goes from street to street to seek after his shaving. He wearies his hand to fill his belly, as bees feed by their labors,"1

The reader has now some idea of the school books of the Egyptians. They are venerable for their antiquity, for many of them were written six or seven centuries before Moses was born, according to the mest moderate computation. They throw light not only on the history of education but on the history of the human mind. Their importance will excuse the length of the extracts that have been given.

These works served not only as readers but were also learned



¹ Schmidt-Hannak, G. der Pædagogik, p. 212; S. Birch in Records of the Past, 1st series, vol. vii., p. 147 ff.

by heart and copied. Moreover, they served as models in the higher course of composition. The methods followed in the lower classes of the temple school no doubt were about the same as those we learned to know when we followed the instruction of the poor Egyptian boy articled to the scribe. In the upper course the work was more ambitious and freer from drudgery. But, as in his earlier school years, the scholar's compositions were gone through by the teacher, errors, whether of penmanship, of spelling, or of composition, were pointed out on the margin, and the teacher's judgment set down at the end. The scholar's tablet in the collections of the New York Historical Society has the note, "diligently done," to praise the pupil's work. Hard-working students laid great stress upon the teacher's criticism, and insisted upon their right to be criticised. When the teacher neglected this duty he was not always thanked for it by his scholars. Witness a letter to a teacher, whose letter to him had not proved as instructive as the young man desired and respected: "I received your letter when I drove out with my mares. You have a good time, you are merry, you are getting ready to send me an answer, but you do not go to your study to read over my letter. You find that it is neither a pleasure nor a delight. Therefore thy words are confused and misleading, and all your directions wrong." If the mummy of this phenomenon could only be found its photograph might do service among careless students and-teachers. But if the Egyptian enfant terrible was plain spoken to his teacher when negligent, a conscientious instructor was not without honor among his pupils. We have letters which, if not dictated, must have done good to the Egyptian chiron's heart. Listen to a specimen: "Prince of scribes, heart of gold, man of eloquent lips, whose voice it is a delight to hear, fountain of godlike words, who knowest all things, man, honored by the power and the work of Safech, the servant of the lord of Sesûnnû in the hall of the book-house (Safech was the goddess that presided over libraries), diligent worker in the archives, first among thy peers, chief of thy fellow-citizens, steady stay of the young, etc." It closes with the youth's good wishes: "Mayest thou live in health and strength, rich, honored, well provided for! May nothing be denied thee that can make life pleasant. May joy and mirth ever dwell at the gates of thy ways!... May the gods vouchsafe that no one may rise against thee, that thou mayest not be robbed of the rewards of thy old age, etc."

But let us come back to our compositions. In the highest classes the young men not only reproduced models, but also original compositions. Of course these were criticized as well as the rest, the thoughts, arrangement and style being duly exam-

Time has been kind to an old pedagogue contemporary with Ramses II., of the Nineteenth Dynasty (about 12-1250 B.C.). It has handed down to us a criticism of an essay on the theme, "A Hero." Our youthful literateur had made a gigantic effort, confused in thought, bombastic in language, plentifully interlarded with borrowed Semitic words, which seem to have been affected by Egyptian swells as some society people now affect French; in short, the essay was a concoction without sense or form. author, however, seems to have thought he had perpetrated a masterpiece. The master's answer is full of sascasm, and to ridicule the pupil he also uses a host of foreign words. "Your composition is decked with too many borrowed plumes. It is a gallimateses of high-flying verbiage, whose interpretation will be the reward of those who attempt it, a gallimateses that you have concocted ad libitum. 'I painted a champion,' say you more than once. I ask, Is there truth in your picture?" Next the teacher points out what is unnatural and unsuitable in the description. "If you are displeased with my words," he continues, "I know your heart thoroughly. A father censures, but he fully knows how to keep measure in his censure. I know you. Insignificant are your words, confused is your arrangement. You come to me wrapped in distortion, laden with faults. You distort words according to your whims I have struck out the end of your composition and return your descriptions. It is a pot pourri when you listen to it; an uneducated man cannot understand it. It is the language of a man from the marshes (Semitic), mingled with the language of Elephantine (Egyptian). As a scribe of Pharaoh you are like the water of the Nile, that fertilizes the land. If you find my measures apt, you will be to us like the far-famed Uah.1

While the Egyptian schools furnished what must be admitted to be, in many respects, a well digested language-instruction, including reading, composition, and style, grammar formed no part of the course. Indeed, the Egyptians, as far as we know at present, were not acquainted with even the elements of grammar. To us, this seems strange. Still, why should we be astonished, when we recall that Homer and Hesiod, Æschylus and Sophocles, Herodotus and Thucydides, were equally ignorant of the grammar of their own tongue? Greek, however, is a language whose many and logical forms invite to the study of grammar. In Greece, grammar was the offspring of philosophy, and especially of logic. The Egyptians were, no doubt, philosophers and thinkers, but they never worked out the systematic scheme of dialectics, which, alone, ought to immortalize the great name of Aristotle.

¹ Schmidt-Hannak, G. der Padagogik, i., pp. 218-9.

Of elementary arithmetic, we have already spoken. It is natural to ask: How far did the Egyptians carry this science, and mathematics in general? We know that the Greeks, who were the disciples of the Egyptian scribes and priests, speak in terms of unstinted praise of the mathematical learning of the Egyptians. Phales of Miletus, the first Greek who computed an eclipse; Pythagoras, who discovered the theorem that the square of the hypotheneuse equals the sum of the squares of the other two sides of a right-angled triangle; Anaximander, who made the gnomon or sundial known to the Greeks; Omipedes of Chios, who solved the problem of dropping a perpendicular on a straight line from a given point; not to forget Anaxagoras of Clazomense, who, Plutarch tells us, squared the circle while in prison (we shall see below how this statement is to be understood); Plato, whose knowledge of geometry embraced all that was known in his time-all these great Greek mathematicians laid the foundation of their science in Egypt. But, while they all eulogize their Egyptian teachers, we learn but little of what they had been taught. We therefore turn the more eagerly to the Egyptians themselves, to learn from them the character of their mathematical lore. Unfortunately, while the harvest of Egyptian readers has been rich, there remains but a single book on the arithmetic and geometry of the Egyptians. This is the well-known Rhind papyrus in the British Museum, called also, after its translator and explainer, the Eisenlohr papy-Because of the exceptional importance of this ancient mathematical treatise we shall make it the basis of our remarks on Egyptian mathematics. Its title is, "Rule to Arrive at the Knowledge of all Things Dark, . . . of all Mysteries found in Objects." This book was compiled in the year 33, day Mesori, of Ra-ā-us, King of Upper and Lower Egypt, Life-giving, on the basis of Old Works written in the time of King Amenhemat III. The scribe Ahmes is the Author." Ra-ā-us was one of the Asiatic Hyksos kings, in whose time Joseph came to Egypt. His date may be set down as about 1800 B. C. King Amenhemat III., however, a much more ancient sovereign, belonged to the Twelfth Dynasty (2300-3000 B.C.). Surely, our book is worthy of attention on account of its age alone. But, apart from its age, it is well worth studying in itself. What strikes us at first sight is the fact that, though the title promises us rules, there are few rules in the work. To-day, it would be entitled, "Problems and Solutions." It is not an elementary book on arithmetic, for it starts with fractions. When we bear in mind. that the only fractions the Romans dealt with were halves, thirds, fourths, sixths, and twelfths, and their derivatives, the old Egyptian deserves our admiration. He is afraid of no fraction whatever its denominator. On the other hand, his method of handling fractions appear decidedly odd to us moderns. The Egyptians

turned fractions with numerators, other than I, into the sum of two or more fractions with the numerator 1. For example, Problem I. reads as follows: Divide 2 by 3, then by 5, and so on, · by all the odd numbers up to 99. His solution begins as follows: $\frac{2}{3} = \frac{1}{2} \frac{1}{6}$; $\frac{2}{8} = \frac{1}{3} \frac{1}{16}$; $\frac{2}{7} = \frac{1}{4} \frac{1}{28}$; $\frac{2}{9} = \frac{1}{6} \frac{1}{18}$, etc. That is to say, his real problem was: Turn any fraction having the enumerator 2 into the sum of several fractions all having the numerator 1. He leaves out all the even denominators, for they are reduced to fractions having I as numerator by cancellation. We may add, that fractions with 1 as numerator were written by placing a dot over the denominator.

To see the application of this problem, with its resulting table. we shall turn to Problem 61, in Eisenlohr's translation. It is remarkable, because it is one of the few cases in which Ahmes really gives a rule. Here is our problem: "Find \{ of a fraction; if you are asked what is $\frac{2}{3}$ of $\frac{1}{6}$, take its double and its sixfold, that is, $\frac{2}{3}$ of it. Do the same for every other fraction." To understand Ahmes, we must recall that $\frac{2}{3} = \frac{1}{3} + \frac{1}{3}$. Now, when he tells us to take the double of $\frac{1}{6}$, he means double the only number written in the Egyptian fraction, i.e., the denominator, for the numerator was only a dot. Hence, double $\frac{1}{6}$ means $\frac{1}{10}$, and sixfold $\frac{1}{6}$ is $\frac{1}{30}$. Therefore, $\frac{2}{3}$ of $\frac{1}{5} = \frac{1}{10} + \frac{1}{30}$.

No doubt, this method of computing fractions is appallingly round about and far from clear. Our schoolboys have reason to bless, as benefactors, the nameless discoverers of our simpler methods, for Ahmes powerfully brings home to us how difficult it must have been to reach these easy methods. For let us not infer that Ahmes was, arithmetically speaking, a fool. Problem 40 will prove the contrary. We state it as in the original: "Loaves 100 to persons 5; \frac{1}{2} of the first 3 the whole of persons, the two last; what is the difference?" His answer is: "Do as is done, the difference is $5\frac{1}{2}$, 1, $6\frac{1}{2}$, 12, 17 $\frac{1}{2}$, 23. Multiply these numbers by $1\frac{2}{3}$: $1\frac{2}{3}$, $10\frac{2}{3} + \frac{1}{6}$, 20, 29 $\frac{1}{6}$, 38 $\frac{1}{3}$." What does it all mean? The problem in modern language is: Divide 100 loaves among 5 persons, so that, while each person will receive a certain number more than the preceding one, 4 of the loaves given to the three persons having the largest shares shall equal the sum of the two smallest shares? We moderns should call in the aid of algebra to solve the question, and then would require two equations with two unknown quantities. Ahmes must have proceeded somewhat after the following fashion. Assume that A (the lowest) receives one loaf, then:

A has I loaf,

B has I loaf and I difference.

C has one loaf and 2 differences.

D has 1 loaf and 3 differences. E has I loaf and 4 differences.

A and B have 2 loaves and 1 difference. C, D and E have 3 loaves and 9 differences.

By the terms of the problem seven times A and B's shares are once C, D and E's shares, or

14 loaves and 7 differences are the same as 3 loaves and 9 differences, that is to say: 14 loaves are the same as 3 loaves and 2 differences; therefore 11 loaves are the same as 2 differences and 5½ loaves is the common difference.

This gives Ahmes's first series 1, $6\frac{1}{2}$, 12, $17\frac{1}{2}$, 23, of which the sum is 60 not 100. But as 100 is $1\frac{2}{3}$ of sixty, he tells us to multiply the series by $1\frac{2}{3}$, which gives the correct answer.

How highly Plato and the Greeks in general thought of the Egyptians as geometricians, we have seen above. Ahmes does not support these eulogies by the samples he brings us of Egyptian geometry. On the state of geometry in Egypt as a science, his book throws little light; it does not pretend to grapple with a single geometrical theorem. But even, in his applications of geometry, Ahmes is, in a way disappointing. Take for instance, Problem 51. It demands the area of an isosceles triangle, given the length of the three sides, viz.: 10, 10, 4. His answer is 20, i.e. $4 \times \frac{91}{2}$. Of course this is wholly wrong in method, though in practice it varies only 2 per cent from the truth. Calling a, a, b, the sides of the triangle, his formula is $\frac{a}{2} \times b$; the true formula is $\frac{b}{2} \times 1/a^2 - \frac{b_2}{4}$, which, as appears at once, involves the extraction of the square root. It is likely enough that this made the trouble for Ahmes, for nowhere in his book is there any proof that he knew how to extract the square root. The other example illustrating geometry, that we shall place before our readers, involves the quadrature of the circle. To find the area of a circle, Ahmes tells us, square \(\frac{8}{6} \) of the length of its diameter. Of course the result is merely approximate, but a very good approximation it is. Prof. Cantor tells us that Ahme's rule gives as the value of the ratio of the diameter to the circumference $\pi = 3.1604$. The true value is $\pi = 3.14159 +$; the error is less than $\frac{2}{100}$. It does not follow, of necessity, that the application of such approximate methods implies ignorance of the true geometric theory. The Egyptian monuments furnish us the proof. About 100 B. C., 200 years after the great Euclid wrote and taught geometry at Alexandria, the geometers who surveyed the landed property of the temple of Horus at Edfu, used the very same formulas for calculating the area of triangles and trapezoids, which Ahmes laid down fifteen hundred years before. Our papyrus also shows that Ahmes, if he did not know trignometry, followed methods of determining and measuring angles, that imply knowledge equivalent to trignometry.

¹ Vorlesungen über Geschichte der Mathematik, i, p. 50.

We have now given a picture of the temple schools of Egypt, so far as they furnished what we call elementary and college education. But their scope was far more extensive than that of our grammar schools and colleges. Their programme included professional education also. Clement of Alexandria, a writer of the second century after Christ, for many years the head of the Christian catechetical school of Alexandria and the teacher of Origen, gives us in brief an analyses of the so-called 42 canonical books of the Egyptians. Their names are derived from the different grades of the Egyptian hierarchy, and the books themselves sum up all the learning of the Egyptian priests and their schools. The first two books were called the books of the Chanters: of these the former was a collection of hymns, the latter an account of a king's life. The next four books were those of the horoscopists and dealt with astronomy. Book I. treated of the fixed stars. Book II. of the motions of the moon, sun and planets. Book III. of the relative position of the sun and the moon at different times; the last book, of the heliac rise of the constellations. To the hierogrammatists were awarded the next ten books. In these were found instructions in hieroglyphical writing. Cosmography, geography, especially the geography of the Nile and its phenomena, metrology and directions for taking the inventory of temple property, education and liturgy were the themes of the ten books of the stolists or vestment keepers. To the student of pædagogy the loss of these is especially a subject of regret. Next came the ten hieratic books of the prophets. These were works on law and theology. In the thirty-six books enumerated was found the whole speculative philosophy of the Egyptians. The remaining six books, those of the pastophori, contained their medical lore.

Egyptian archæology has confirmed the account of Clement. All the sciences, mentioned by the Christian theologian, who surely had the best sources of information, archæologists think, were taught in the temple schools. Papyri have been found embodying the teaching of the Egyptians in some of these branches of human knowledge. The Ebers Papyrus, for instance, is a treatise on medicine and surgery, which, Prof. Ebers thinks, was one of Clement's six books of the pastophori. It was written by a sage of the Saite temple school. Its contents, however, suggest no exalted idea of the Egyptian leeches. He seems to have had little more confidence in his drugs and salves than his modern brother; but he supplemented their lack of efficacy by a plentiful use of superstitious incantations. Though the Egyptian doctors disembowelled and more or less dissected the human body for the purpose of mummifying it, their knowledge of anatomy and physiology was disappointingly slim. If there were able surgeons

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among them, they must at times have been disposed to anathematize their quack brethren, for some Egyptian mummies reveal broken limbs whose setting was no credit to the Egyptian Æsculapius. The medical schools, Ebers holds, were part of the temple schools, and the fact that the author of the Ebers Papyrus was a Saite priest, seems to speak for his view. Maspéro, on the contrary, thinks that medicine was taught in separate professional schools. This view is supported by Clement's enumerating the medical books apart from the other works that constituted the wisdom of the Egyptian schools. Moreover, as the paraschites or embalmers were classed as scribes and physicians, and as their training involved the maining of the human body, which the Egyptians held superstitiously sacred, it is hard to admit that they would allow the practical teaching of their art, in the sacred halls of their temples. But be that as it may, so much is certain, that medicine was systematically taught in Egypt, when in Babylonia and Greece, the last resort of the sick man was to have himself carried to the market place and treated according to the empirical suggestion of the good natured passer-by.

Law, too, we infer from Clement, was taught by the scribes of the temples. That the Egyptians had a well-developed system of law is certain, though in this department they were certainly not as systematic as the Babylonians. Still, we know little of the principles that underlay their legal system, nor of the way in which law was taught. From the Judicial Papyrus of Turin it appears that even conspirators against the king had a regular trial before a commission appointed by the king, and that a record was kept at least of the indictment and of the decision. All this implies a regular procedure, and set legal principles. Among the latter, we learn from the Turin Papyrus, was the rule that any one, aware of the intention of somebody else to commit a capital crime, and not making known the fact to a magistrate, became an accessory, and was punished with death like the principal.

The profoundly religious spirit of the Egyptian people, and their complicated mythology, might not, in themselves, justify the inference that theology, and, therefore, philosophy, formed an important part in their system of university education. The Romans, as long as they remained uninfluenced by Greek philosophy, were imbued with deep religious feelings. Almost every one of their daily actions, they believed, was under the control of some greater or lesser god or goddess; still, their religion was purely practical. But in Egypt, the prominence given to the doctrine of the immortality of the soul, and of its future reward or punishment, was the

¹ Records of the Past, series i., vol. viii., p. 53 ff.

fecund seed of moral and religious doctrine, and of philosophic speculation. Not a few distinguished authorities incline to the view that the priests of Egypt, beside the grotesque polytheism they taught to the people, had an esoteric system for themselves, and that this system was monotheistic. There are strong reasons for holding this view; but, as the best Egyptologists have not yet come to an agreement on this question, the arguments are not decisive. Of the religious books of the Egytians, the most important that has come down to us is the "Book of the Dead." That it was used in their schools we do not know. We have, also, a number of Egyptian hymns, some of which were undoubtedly used in the schools, and quite a number of works on morals, of which specimens have been given above. Their ethical system, as the reader may infer from the extracts given above, was of a practical character, and included the chief points of natural morality.

Astronomy, also - and astronomy in Egypt included astrology —was taught in the temple schools. Of the details of this science, as taught by the sages of Thebes, and On, we learn but little from Egyptian sources. As the Sothis period of the Egyptians is the cycle of 1460 years, after which the year of 365 days and the year of 365 1/4 days coincide again astronomically, it is certain that, at least 2000 years before Christ, the Egyptians knew the year of 365 1/2 days, which was the basis of the Julian calendar. The minutely correct orientation of the great pyramids of Ghizeh show that they had an accurate knowledge of the four cardinal points, and therefore of the more remarkable constellations, in the days of Khufu, Khafra, and Meukesos, that is to say, in the time of the Fourth Dynasty. The Greeks speak in the highest terms of the astronomers of Egypt. Among the Greeks themselves, Eratosthenes, who first calculated the circumference of the earth, was a lecturer at the Museum of Alexandria under Ptolemy Evergetes (225 B.C.). Hipparchus, perhaps the greatest astronomer of antiquity (150 B. C.), also resided at Alexandria, according to Delaurbre. It is natural, then, to infer that these great Greek astronomers owed their success, in part, to the many Egyptian observations that they had the opportunity to consult at Alexandria. We must not forget to state, that the precession of the equinoxes was probably not unknown to the Egyptians.

That geography, both local and cosmical, was taught in the temple schools we deduce from the statement of Clement of Alexandria; what were the nature and methods of the instruction given have not been ascertained thus far. Engineering, too, must have been taught, and scientifically taught. The great temples, and the colossal monoliths, to transport which offers no slight difficulties to the modern engineer, proves the fact. But again, we are ig-

norant of Egyptian theories and methods of teaching. The sciences of chemistry, physics, and biology were unknown to the Egyptians, at least before the age of the Ptolemies. Isolated facts, no doubt, they observed, but they did not weave them together into general laws.

Lastly, we come to the fine arts, and first of all to music. dorus informs us that the Egyptians did not include music in the education of their children, because of its effeminating influence. Plato, on the other hand, asserts that the youth of Egypt were taught beautiful melodies, determined by strict laws; these melodies, so went the tradition, were the gift of Isis, and were so sacred that no changes in them were permitted. The monuments teach us, that in their liturgical, as well as their military processions, choruses of singers and musicians formed a prominent feature, and that the charms of music added zest to the pleasures of the social circle. Harps, lyres, guitars, tambourines, single and double pipes and flutes, are seen depicted on their monumental bas-reliefs. Some harps of the time of Ramses II. (Nineteenth Dynasty) were found at Thebes, and their construction is so perfect that, according to Mr. Bruce, they alone prove, beyond controversy, that when they were made, geometry, drawing, mechanics, and music were in a flourishing condition on the banks of the Nile. Whether music was taught in separate schools, or formed a feature in the curriculum of the temple schools, we cannot determine by direct testimony. Plato's words, however, as well as from the use of music for liturgical purposes, we are inclined to infer that sacred music, at least, was taught there,

The temples of Egypt, its monuments, its sculptures, and its miniatures, are so numerous and so venerable, that we can have no doubt that architecture and the arts of design were carefully taught in the land of the Pharaohs. This conclusion is confirmed by the fidelity with which generation after generation carried out the artistic traditions of its predecessors. Schools of art in the modern sense, that is to say, schools composed of the pupils and imitators of some great master, will hardly account for the persistent uniformity that characterizes Egyptian art for more than two thousand years. This uniformity is most easily explained, if we assume that architecture, sculpture, and design were subjects taught in the great schools in which the priests and scribes handed down the wisdom of the Egyptians to so many generations. ought we to be surprised at this. The great architects of the Middle Ages, the men that designed the cathedrals of France, and the minsters of England learned their art in the monastic schools. The intelligence and care of modern archæologists enable us to obtain at least some idea of the manner in which artists were

trained on the Nile. To M. Maspéro, above all, we owe this knowledge.1 Egyptian draughtsmen, he tells us, taught by routine, not by theory. Nothing that remains of their art justifies the belief that they had a canon of proportions based on the length of a man's hand or foot. The master placed a model before the scholar, who copied it again and again, till the copy was perfect. As papyrus was too costly, the scholar's first sketches were made on slabs of limestone, on boards covered with white or red stucco. or on the backs of useless manuscripts. Instead of a brush, he used a reed whose delicate fibres separated after being soaked in water. The colors generally used were black and red, cakes of which were kept on the painter's pallette. Pallette in hand, the student squatted, cross-legged, before his copy; his wrist was unsupported while at work. The master corrected faults in red ink. In transferring designs from papyrus to the wall, both the model and the wall were divided up into the same number of squares; by enlarging the squares on the wall, the model could be proportionately enlarged to any desired size. In the squaring of the surface to be covered, the reader will recognize an expedient not unknown to modern times.

Sculpture was taught no less systematically than drawing. Maspero has given us a graphic description of the training of an Egyptian sculptor: "As soon as the learner knew how to manage the point and the mallet," he tells us, "his master set him to copy a series of graduated models representing an animal in various stages of completion, or a part of the human body, or the whole human body, from the first rough sketch to the finished design. Every year these models are found in sufficient number to establish examples of progressive series." Not a few models for the study of the round have come down to us. There were separate models for the different parts of the body. If a complete statue was desired, these parts were joined together. Some models are plaster casts, but before the Ptolemaic era, sandstone was oftenest used for the purpose of making models. Usually these models represent the portraits of the Pharaohs, and are cubes measuring about ten inches each way. "The work was begun by covering one side of a cube with a network of lines crossing each other at right angles; these regulated the relative position of the features. Then the opposite side was attacked, the distances following the scale on the reverse face. On the first cube a mere oval was designed, a projection in the middle, and depressions to the right and left, indicating the nose and eyes. As we pass from cube to

¹ See Maspéro, Egyptian Archaology, pp. 164-5.

² Maspéro, Egyptian Archaology, p. 192.

cube, the forms become clearer and the face emerges by degrees. The limits of the contours are marked off by parallel lines cut vertically from top to bottom. Then the angles were cut away and smoothed down to bring out the face. Gradually the features became disengaged from the block. When the last cube is reached there remained nothing to finish save the details of the head-dress and the basilisk on the brow."

Our picture of Egyptian education would be incomplete without a few words on the discipline of the temple schools. The Egyptian parent did not spare the rod. When the mason, tired with toil, returned home at nightfall, Duan-Le-Kharda tells us, he sought relief for his weary body by birching his sons. Even Ptah-hotep, we have seen, advises the father to strike his impudent son on the mouth. In the schools the discipline was paternal. In a teacher's letter to his pupil we find the following passage: "Write diligently and never be lazy, or you will be well thrashed. Do not take a day of rest or you will be beaten. Young men have backs; they listen when they are beaten." Another teacher addresses the following homily to his scholar: "You are like an ass that is beaten every day; you are like a stupid negro that is brought for tribute. The vulture is made to perch, the falcon taught to fly; I will make a man of you, you rascally scamp. Mark that." These classical lectures were written in the days of the Nineteenth Dynasty, when discipline and study seem to have been on the decline. This fact is strikingly illustrated by a letter written to Ventaur, a namesake of the author of the famous poem on the victory of Ramses II, at Kadesh, if indeed it was not the poet himself. "I hear," says his teacher, "that you have given up science, and roam up and down the streets, frequenting beer-houses. Whenever you drink beer, it deprives you of reason, and your mind is weakened. You are like a broken rudder, like a chapel without its god, like a house without bread, whose walls totter and whose beams shake. Would that you knew that wine is a horror, then you would swear off the shedek-drink, then you would not give your heart to cool drinks, and you would forget the tenreka." But while the rod and the lecture were held in true honor, the master did not forget to influence his pupils by moral suasion, We have already seen that among the books read in school were poems setting forth the value of learning and the advantages of education. The scribe Ani and old Duan-Le-Kharda again and again compare the blessings of the scribe's lot with the hardships of the mechanic's life. No doubt the teachers enlarged on this theme, and impressed on their scholars the necessity of hard work

¹ Maspéro, loc. cit., p. 195-6.

² Schmidt-Hannak, Geschichte der Erziehung, I., 230-1.

in order to prosper. As we have seen above, these admonitions, at least in some cases, bore rich fruits.

The temple schools were open to every Egyptian youth. Neither the scribes nor the priests formed a hereditary caste. Still we must not imagine that the children of the lower classes formed a large proportion of the students in the temple schools of Memphis and Thebes, of On and Khemm. Education was too expensive to warrant such a view. These schools were boarding schools, and boarding schools, even to-day, make heavy demands on the father's purse. From a passage in the Harris papyrus we may judge of the sacrifice imposed on the parents of the boy sent to be educated at these famous high schools. If the father of the student has five slaves, the papyrus tells us, he must give up three of the five to pay for the boy's education. Sometimes, however, day scholars, also, were admitted to the temple schools. In this case the boy returned home after school hours and his midday meal was brought to him. "Your mother," says the wise Ani to his son, Khons-hotep, "went to school, and while you were taught in the scriptures, she came every day to your teacher bringing the bread and the beer of her house." Then he bids him never forget all he owes to his mother. However, the day scholars were the exception at the temple schools, which were primarily and chiefly boarding schools. This is worth remarking, as we do not find similar schools in Greece and Rome except in the case of the Neo-Pythagoreans, who are said to have modelled their schools on those of the Egyptians. It is the opinion of very good authorities that the Neo-Pythagorean schools, to a certain extent, served as the models of the monastic schools of the Middle Ages, and thus our own boarding schools may be traced back through these links to the schools of Thebes and Heliopolis.

That the sages of Egypt had their educational theories we may safely infer from Clements's statement. Some of the ten books of the Stolists, it will be remembered, treated of instruction and education. But their theories on education, like those on morals, were probably of a very practical character. Duan-Le-Kharda and Ani promise the student a life of comfort as his reward. The hymn to Thoth tells him that offices are the reward of learning; and Amen-m-aut, the most learned man and chief librarian of Ramses II., writes to his disciple, Pentaur: "The scribe is free from all servile work, from toil in building, and he wields neither hoe nor shepherd's crook." Lofty idealism was no fault of the Egyptian sage. After all, Duan-Le-Kharda was the most idealistic of all these educators. "I taught you to love literature as

¹ Maspéro, Ægypten und Assyrien, p. 16.

your mother," says he. "I placed her beauty before your eyes.... Whoever has sought to profit by her since childhood will be honored..... Surely, when I took you to Khemm (Silsilis) I was led by affection; if you gain a day at school it is for eternity. The work done there is as lasting as the hills."

What was the relation of the state to the schools of Egypt? Since even the Persian Darius, as King of Egypt, was so keenly interested in the temple schools on the banks of the Nile, the native sovereigns surely gave them even more care and attention. Pharaoh was himself a god and necessarily had a sharp eye to the honor and well-being of his fellow-gods. Now the schools were but parts of the temples, and the teaching in a manner must have been looked upon as a part of worship. The teachers were priests. Nay all the Pharaohs of the Twentieth Dynasty were themselves priests. Besides the schools were necessary to the state. Without them the government could find neither competent judges nor able engineers and architects, not to speak of physicians to heal or embalm them, and artists to glorify their exploits. But in a land, dependent for its very life on the regulation by its engineers of the water supply furnished by the sacred Nile, it was a paramount duty of the government to provide the training needed by the engineer. How far the Pharaohs were interested in the elementary schools it is more difficult to determine. It may well be, that in Egypt, as in early Greece and Rome, the elementary schools were the private undertakings of the teacher. Still the inscription of Darius's commissioner, Uza-hor-enpiris, cited above, indicates that the government claimed the right to inspect them and draft thence scholars for the temple schools. The Ptolemies, it is certain, maintained the great university and libraries of Alexandria. So far as the libraries are concerned we can prove that they only followed the traditions of the native Pharaohs. As early as the Sixth Dynasty, more than 1000 years before Moses, one of the great dignitaries of the court was the "keeper of the bookhouse." One of the most learned men of a later age, was Amenin-aut, chief librarian of Ramses II. Ramses II., according to some scholars, was the Pharaoh, who, as Diodorus relates, built a great library (the Ramessum) and on it placed the inscription, "Remedy of the soul" (φυχῆς φάομακον). All these facts indicate the great interest of the Pharaohs in learning and the schools, and show how much care they devoted to them.

Such is a picture of education in Egypt as revealed to us by the native records. That so far back in remote antiquity, some four thousand or more years ago, there should have been schools at all, surprises many who think the world's enlightenment began with the nineteenth century. That the sages of On and Thebes dis-

covered and applied so many correct principles of pedagogy, claims the admiration of every thinking student of history and philosophy. They recognized the principles of progressiveness in instruction and applied it to language teaching; they knew the advantage of teaching reading and writing simultaneously; they had devised examinations as tests of knowledge, they keenly appreciated style, they had a judicious system of correcting compositions, they anticipated the principles of object teaching and the kindergarten in their method of teaching arithmetic; they not only cultivated drawing and sculpture, but devised clever and progressive methods of instruction in those arts, and last, but not least, they taught their youth sound and wise principles of morals. When we bear in mind that not a little of the wisdom of the Egyptians, both in substance and in the methods of communicating it has come down to us, through Moses on the one hand and through the sages of Greece on the other, the Christian student cannot fail to be interested in the remotely distant education and educators of the land of the sacred Nile.

CHARLES G. HEBERMANN, Ph.D., LL.D.

Scientific Chronicle.

SYSTEMS OF NUMERATION.

A PLEA FOR THE DUODECIMAL.

FOR many years we have been longing for the Duodecimal. Ever since we first came to know of his beauty, his virtues and his power, we have been yearning to see him established in his rightful place, and to see his more successful but less deserving rival, the Decimal, driven out. We still remember the backaches, the headaches, the heartaches, and yet other aches, which we have owed, directly or indirectly, to the enthroned tyrant, and we have hoped to see the world, one day, set free from him. Must we ever hope in vain? Efforts have indeed been made, from time to time, to start this revolution; but obstacles, put in the way by those who should have known better, selfish indifference on the part of those who could have accomplished much, but who would not, timidity on the part of those who have never learned to dare, have caused the great work to be left undone. Archimedes is credited with the saying: "Give me a lever long enough and I will move the world." But it is a pretty hard world to move, and we would bespeak a goodly number of levers, long and strong, with plenty of power at the other end.

To drop unprofitable metaphors, we would say, in plain terms, that we deem it high time to throw aside our *decimal* system of numeration and to adopt, in its stead, the *duodecimal*. It is important for our own sakes, but especially, and very much more important for the sake of posterity, that this be done, and that it be done quickly; for, unless it be done soon, it will ere long be too late.

We cannot join battle immediately, however, but must clear the way by a little previous reconnoitering, taking, as it were, a general view of the whole field and of the enemies to be encountered; we must also try to dispose, sweetly if we can but strongly anyhow, of any lesser foes who might be a hindrance to the main action. To do this we will have to recall to the minds of our readers, certain elementary ideas concerning arithmetical notation in general, and a few of the systems of notation in particular.

NOTATION.

Notation in general may be defined as the art of expressing numbers by means of written symbols; while a system of notation is a particular method of doing this.

THE UNAL SYSTEM.

In order to express a number, say five, we may put down five separate marks of any kind, as 11111. In that case, each mark would stand

for one and nothing else. For want of a better name we have ventured to coin a word for the time being, and to call this method the unal system. Whether any people ever employed it for general business transactions or not, we are unaware. It is however in use even now, though only to a very limited extent, in keeping tally when the things to be recorded come along one by one, as in marking the points in certain games, or the number of barrels, boxes, etc., swung into the hold of a ship. It is very simple in this respect, that only one character, figure, symbol, digit (call it what you will) is required. But no people who had much recording to do could have long stuck to such a method. Its grave defect is that, for any but the smallest numbers, the results become unwieldly.

Let any one undertake, for the sake of experiment, to set down a million by this method. On an average he could make conveniently about two marks per second. At this rate he would have to work steadily eight hours a day for more than seventeen days; and, allowing, what is pretty liberal, 2500 marks to the page, he would cover 400 pages. When done, he could read it, in the unal way, only by repeating one, one, one, etc., till he had reached the million, while the victim who had been forced to listen would not have the faintest scintillation of an idea as to what the whole thing meant.

Or, suppose a professor of astronomy, in the good old, simple, unal days, had, by some means or other, come to the knowledge that the sun is distant from the earth ninety-odd millions of miles, and that he wishes to communicate that scrap of information to his pupils. To get it on the blackboard would take, under the conditions stated above, between four and five years, and if his blackboard were four feet wide, it would have to be more than a mile long.

We can hardly conceive of anything more potent than such a system of numbers as a means of stunting the human mind. Nothing that we know of could even pretend to compete with it, except perhaps our present, chaotic system of English spelling; and even that, bad as it is, would be left far behind; though, being the sole (soul, sowl, sol, soughl, soal, psoughl, psol, psoul, psowl . . .) competitor, it might well be adjudged a second prize. If the world had been restricted to the unal system, it could scarcely have been civilized, at least arithmetically.

THE BINAL SYSTEM.

Let us now pass to the consideration of some other possible systems. The first step we make out of the quagmire of the unal system (which can hardly be called a system at all), is into the binal system. Here we make use of two marks, or symbols (o and 1), the former of which (the o), when standing alone, represents no value whatever, the second of which (the 1), when standing alone, means one. But just here, the influence of system comes in; for, the value of the symbol 1, when used in conjunction with other 1's or with other o's, depends on its place in the line; and the influence of the o consists in keeping the 1's in their proper places. Now the pith of the binal system is in this, that our sym-

bol 1, when moved one space to the left of its primal position, has twice its fundamental value; when moved another space, twice that; and so on, indefinitely. Very poetical, you may say, but somewhat obscure. Let us try to illuminate it a little.

To do so we will take a line of dots, as which represent nothing except positions. Now, if our symbol r, is placed on the right-hand dot, thus . . . r, it means simply one. If placed on the next dot (. . r .) it will have a value of twice one, or what we call two. If placed on the next dot (. r . .), it will be twice two, or what we call four; and if placed on the next (r . . .), it will be eight; and so on, increasing in a two-fold ratio by every move from the right towards the left. Strictly speaking we have no right to use the word two, because that supposes we have a symbol whose name is two, whereas, the number two is not expressed in this system by a symbol, but by a combination, and the name of the combination should be drawn from the components. But it matters little, as we do not intend to set the binal system up for use, and our common decimal system even, is not scientifically correct on this point.

The ratio (two), made use of in this system, is the radix, the base of the system. In what precedes we may notice two things: first, that the dots on the left of the I are serving no useful purpose, and may be omitted; second, that the mean, miserable, little dots might be mistaken for fly-specks, or vice versa, and that might be the cause of serious errors. So we round each of them out into a full o, big enough to command respect, and to keep the little ones in their proper places. In this system therefore, the combination 10 (which should be read, one-naught) means not ten but two. So I I (one-one) means two and one, or our three; I o I means five; I I I I means eight and four and two and one, or fifteen.

For the sake of comparison, and as a starting-point for those who wish to investigate this matter further, we give, later on, a table showing the way of expressing numbers from zero to a hundred in several systems. We remark in the meantime, however, that the binal system possesses the advantage over the unal of greater conciseness. To express a million in the unal system would require, as we have seen, a million marks, while in the binal system it is accomplished by the use of only twenty. This is better, but it is still too bulky for convenient handling.

In this system the usual operations of arithmetric would, however, be ideally easy, so much so that it has been suggested that it might be worth the while to translate the numbers from our *decimal* system to the *binal*, perform the required operations, and then translate back again. We are afraid that the easiness of the work would hardly compensate for its extra length. The rules for translating from the decimal system to any other, and *vice versa*, will be given below.

THE TERNAL SYSTEM.

In the binal system, just described, we had need of two symbols; in the ternal we will need three. Let them be 0, 1, 2, and let them have the intrinsic values of zero, one, two, respectively. The essence of the ternal system is in this, that the value of 1 or 2 is increased three-fold at each removal through one space towards the left; or, what is saying the same thing, that the base of the system is three. The value of the combination 10 (one-naught) is therefore three; of 20 (two-naught), six; of 100 (one-naught-naught), nine; of 212 (two-one-two), twenty-three. A million would require thirteen places to be filled with the proper combination of zeros, ones and twos. This is again an improvement, but we hanker after something better yet.

THE QUATERNAL SYSTEM, ETC.

It ought to be beginning to dawn on us by this time that we may take any whole number whatever as a base, and construct the corresponding system on the lines indicated above. The number of symbols needed in each case will be equal to the number expressed by the base; thus, using the symbols with which we are already familiar, we will have, for

The unal system, the symbol 1.

The binal system, o, I (two symbols).

The ternal system, o, 1, 2 (three symbols).

The quaternal system, o, 1, 2, 3 (four symbols).

The quinqual system, o, 1, 2, 3, 4, etc.

The sextal system, o, 1, 2, 3, 4, 5.

The septimal system, 0, 1, 2, 3, 4, 5, 6.

The octaval system, 0, 1, 2, 3, 4, 5, 6, 7.

The nonal system, 0, 1, 2, 3, 4, 5, 6, 7, 8.

The decimal system, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

The undecimal system, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, t.

The duodecimal system, 0, 1. 2, 3, 4, 5, 6, 7, 8, 9, t, 1.

Our present usage allows us only ten symbols, so that for the undecimal system we need an extra symbol. Its name is ten, so that provisionally, until a new sign has been agreed on, we take the initial of ten, i.e., t. For the duodecimal system we need yet another; its name is eleven; so we take the l, not the e, because that e is too small to stand up in a row of numerical symbols, and besides l will stand very well for 'leven. We might go on indefinitely, but since we have set our heart on the duodecimal system, it will be correct to stop there.

It is clear that the greater the value of the number used as a base, the more concise the expression, for any number larger than that base, will tend to be. As an illustration of this fact, we will translate a million. into its equivalent expression in several of the systems. We need:

For the unal, a million separate digits.

For the binal, twenty digits, viz., 11110100001001000000.

For the ternal, thirteen digits, viz., 1212210202001.

For the quaternal, ten digits, viz., 3310021000.

For the quinqual, nine digits, viz., 224000000.

For the sextal, eight digits, viz., 33233344.

For the septimal, eight digits, viz., 11333311.

For the octaval, seven digits, viz., 3641100. For the nonal, seven digits, viz., 1783661. For the decimal, seven digits, viz., 1000000. For the undecimal, six digits, viz., 623351. For the duodecimal, six digits, viz., 402854. For the centesimal, four digits, viz., 1000.

In the next table we may see at a glance the relation between the first twelve systems, through all the numbers up to one hundred inclusively. They look formidable enough, but it is only in looks, and need merely to be pondered on, in the light of what we have already seen, in order to be appreciated. There are doubtless many readers of the QUARTERLY who will just revel among the beauties of these seemingly prosaic columns of figures.

The first vertical row consists merely of our common numbers in regular order, such as we have been fed on from childhood up, or down. They have been placed there as a guide to keep us straight, but are found again in their proper place further to the right. Reading horizontally across the page, each number means exactly the same thing, but as a general thing the names would be different.

EQUIVALENT EXPRESSION FOR ONE HUNDRED NUMBERS IN VARIOUS SYSTEMS.

	Unal.	Binal.	Ternal.	Quaternal.	Quinqual.	Sextal.	Septimal.	Octaval.	Nonal.	Decimal.	Undecimal.	Duodecimal.
(0)	0	0	٥	0	0	0,	0	0	0	0	٥	o
(1)	I	1	1	I	1	I	1	1	1	I	1	1
(2)	11	10	2	2	2	2	2	2	2	2	2	2
(3)	111	11	10	3	3	3	3	3	3	3	3	3
(4)	1111	100	11	10	4	4	4	4	4	3 4	4	4
(5)		101	I 2	11	10	5		5	5			5
(5) ¹ (6)	111111	110	20	12	11	10	5 6	5 6	5 6	5 6	5 6	6
(7)	etc.	111	21	13	I 2	11	10	7	7		: 1	7
(7) (8)	I	1000	22	20	13	I 2	11	10	8	7 8	7 8	8
(9)	etc.	1001	COI	21	14	13	I 2	11	10	9	9	9
(10)		1010	101	22	20	14	13	12	11	10		í
(11)	j	1011	102	23	21	15	14	13	12	11	- 1	Z
(12)		1100	110	30	22	20	15	14	13		1 1	10
(13)		1101	111	31	23	21	16	15	14		12	
(14)		1110	112	32	24	22	20	16	15	14	13	12
(15)		1111	I 20	33	30	23	21	17	16		14	
(16)		10000	121	100	31	24	22	20	17		15	14
(17)		10001	122	101	3 ² 33	25	23	21	18	17	16	15
(18)		10010	200	102	33	30	24	22	20	18		16
(19)		10011	201	103	34	31	25	23	2 I	19	18	17
(20)		10100	202	110	40	32	26	24	22	20	19	18

EQUIVALENT EXPRESSION—CONTINUED.

1		1 1								1 1.
	Unal.	Binal.	Ternal.	Quaternal.	Quinqual.	Sextal.	Septimal.	Octaval.	Nonal.	Decimal. Undecimal. Duodecimal.
(21)		10101	210	111	41	33	30	25	23	21 1/ 19
(22)		10110	211	112	42	34	31	26	24	22 20 I <i>t</i>
(23)		10111	212	113	43	35	32	27	25	23 21 1/
(24)		11000	220	120	44	40	33	30	26	24 22 20
(25)		11001	221	121		41	34	31	27	25 23 21
(26),		11010	222	122	101	42	35	32	28	26,24 22
(27)		11011	1000	123		- 1	36			27 25 23
(28)		11100	1001	130	103	43 44		33	30	28 26 24
(29)		11101	1002	131	104	45	40 41	34 35	31	29 27 25
(30)		IIIIO	1010	132		50	42	36	33	30 28 26
(31)		11111	1011	133	111	51	43	37	34	31 29 27
(32)		100000	1012	200	112		44	40,		32 21 28
(33)		100001	1020	201	113	5 2 5 3	45	41	35	33 30 29
(34)		100010	1021	202	114	54	46	42	36 37	34 31 21
(35)		100011	1022	203	I 20	_ 55	50	43	38	35 32 21
(36)		100100	1100	210	121	100	51	44	40	36 33 30
(37)		100101	1101	211	122	101	52	45:	41	37 34 31
(38)		100110	1102	212	123	102	53	46	42	38 35 32
(39)		100111	1110	213	124	103	54 ₁	47	43	39 36 33
(40)		101000	1111	220	130	104	55	50	44	49 37 34
(41)		101001	III2		131	105	56	51	45	41 38 35
(42)		101010	1120		132	110	60	52	46	42 39 36
(43)		101011	1121	223	133	111	61	53	47	43 31,37
(44)		101100	1122	230	134	I I 2	62	54	48	44 40 38
(45)		101101	1200	231	140	113	63	55	50	45 41 39
(46)		101110	1201	232	141	114	64	56	51	46 42 31
(47)		101111	I 202	233	142	115	65	57	52	47 43 3/
(48)		110000	1210	300	143	I 20	66	60	53	48 44 40
(49)		110001	1211	301	I 44	12I	100	61	54	49 45 41
(50)		110010	1212	302	200	I 2 2	101	62	55	50,46 42
(51)		110011	I 220	303	201	123	102	63	56	51 47 43
(52)		110100	1221	310	202	124	103	64	57	52 48 44
(53)		110101	1222	311	203	125	104	65	58	53 49 45
(54)		110110	2000	- 1	204	130	105	66,	60	54 41 46
(55)		110111	2001	313	210	131	106	67	611	55 50 47 56 51 48
(56)		111000	2002	320	211	132	110	70	62	50 51 48
(57) (58)		111001	2010	321	212	133	111	71	63	57.52 49
(50)		111010	2011	322	213	134			64 6r	58 53 47
(59) (60)		111100	2012	323	214	135			65 66	0 / 0
(61)		111101	2021	330 331	221	140	114	74 75	67	60 55 50 61 56 51
(62)		111110	2022	332	222	142	116	76	68	62 57 52
(63)		111111	2100	333	223	143	120	77	70	63 58 53
(64)		1000000	2101		224	- 1	121	100	71	
(65)		1000001	2101		230	144 145	121	101	72	64 59 54 65 57 55
(66)		1000010	2110		231	150	123	102	73	66 60 56
					-31		3		13	

EQUIVALENT EXPRESSION—CONCLUDED.

	Unal,	Binal.	Ternal.	Quaternal.	Quinqual.	Sextal,	Septimal.	Octaval.	Nonal.	Decimal.	Undecimal.	Duodecimal.
(67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84)	Ď	100011 100010 100010 100010 100101 100101 100101 100101 100111 100100	2111 2112 2120 2121 2122 2200 2201 2202 2210 2211 2212 2222 10000 10001 10002	1003 1010 1011 1012 1013 1020 1021 1022 1030 1031 1103 1100 1101 1102 1103 1110	232 233 234 240 241 242 243 244 300 301 303 304 310 311 312 313	151 152 153 154 155 200 201 202 203 204 205 210 211 212 213 214 215 220	124 125 126 130 131 132 133 134 135 140 141 142 143 144 145 146 150	103 104 105 106 107 110 111 112 113 114 115 116 117 120 121 122 123 124	74 75 76 77 78 80 81 82 83 84 85 86 87 88	67 68 69 70 71 72 73 74 75 76 77 78 80 81 82 83 84	61 62 63 64 65 66 67 68 69 67 71 72 73 74 75 76	57 58 59 51 60 61 62 63 64 65 66 67 68 69 61 70
(85) (86) (87) (88) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)		1100010 1100010 1011011 101100 1011110 1011110 1011110 1011111 1011100 1011111 1011100 1011111 1010110 1010110	10012 10020 10021 10022 10100 10101 10102 10110 10112 10120 10121 10122 10200	1120 1121 1122 1123 1130 1131 1132 1133 1200 1201 1202 1203	320 321 322 323 324 330 331 332 333 344 340 341 342 343 344 400	221 222 223 224 225 230 231 232 233 234 235 240 241 242 243	151 152 153 154 155 160 161 162 163 164 165 166 200 201	125 126 127 130 131 132 133 134 135 136 137 140 141 142 143	104 105 106 107 108 110 111 112 113 114 115 116 117 118 120	85 86 87 88 89 90	78 79 74 80 81 82 83 84 85 86 87 88 89 84	71 72 73 74 75 76 77 78 79 71 80 81 82

The table might, of course, be indefinitely extended, but we have given enough, we think, to show how tables of any length and width might be constructed. A few remarks, however, will help to make matters still clearer.

We begin all the systems from zero, or nothing, because that is the law for the beginning of all created things, and also because it makes the grouping more symmetrical. The natural turning-point in the grouping is where the number of symbols of the combination changes, as we have indicated by a dash at the end of each group. It will be noticed also that each symbol, taken singly, has the same value in all the systems in

which it may be used that it has in our decimal system. Thus, the intrinsic value of the symbol 7 is seven always; but its systematic value depends, as we have seen, on its place in the line. To understand more clearly how the foregoing table was built up. and how it might be extended to any dimensions, let us take one of the systems and follow it through. Any one you please. The septimal, you say? Well, here goes.

In this system we have seven symbols (o to 6 inclusively). We write them down, as in the table, in their regular order, till we have used them up. We can go no further with single symbols, for we have no more; hence, we must resort to combinations. We begin over again, therefore, by taking the first symbol which has a value of its own, viz., the 1, and move it one space to the left, and keep it there by means of our stop-gap, the o, thus getting the combination 10 (one-naught), which is the first systematic number in this system. Its value is, of course, seven. We then go on by replacing the o by each of the other symbols in regular order, and thus get 10, 11, 12, etc., to 16, which last combination means seven and six, i.e., what we call thirteen. Here again we are stopped for want of symbols, and so we resort to other combinations by taking the next symbol, the 2, and putting it in the second rank, just as we did with the 1. This gives us the combination 20, meaning evidently $(2 \times 7) + 0 = fourteen$ in our parlance. Then 21, which is $(2 \times 7) + 1$, will be fifteen; 23 = seventeen; 26 = twenty. Another start will give us 30 = twenty-one, etc., to 36 = twenty-seven. When we have reached 66, i.e., $(6 \times 7) + 6 = forty-eight$, we are at the end of a group, and can do no more with only two symbols. So we will start afresh with our 1, and move it a second time to the left, thus getting 100. It is evident that this means $(1 \times 7 \times 7) + 0 = forty-nine$. Then all is plain sailing again (as 101 = fifty; 106 = fifty-five) till we reach 666, i.e., $(6 \times 7 \times 7) + (6 \times 7) + 6 =$ three hundred and forty-two. Then our 1 makes another move, and we have 1000 or $(1 \times 7 \times 7 \times 7)$ + 0 = three hundred and forty-three. Enough. The same method is applicable to any and every system, the only difference between them being in the base, and in the consequent number of symbols employed.

But we are so accustomed to the use of the *decimal* system, that, at first, it is difficult to *think* in any other; and, just as a person who is not quite familiar with a foreign language, finds it necessary to think in his own and then translate, so in dealing with these unfamiliar systems, it is necessary to know how to translate. To do this we might go back to the beginning (o) and build up the system to the desired spot. This would, in the case of large numbers, be very laborious, but we may arrive at the result, by a shorter cut, in using the following Rules:

1. To translate from the decimal to any other system.

Divide the given number by the base of the other system, and, on a line with the quotient, set down the remainder (even if it be a 0)—divide the quotient so obtained by the base again, for a new quotient and remainder, and so continue, until the last quotient is less than the base. This last quotient, with the several remainders in their backward order, will be the number required.

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Example.—Translate 237,985 of our decimal system into the equivalent expression of the ternal system.

```
3|237985|
3|79328|1
3|26442|2
3|8814|0
3|2938|0
3|979|1
3|326|1
3|108|2
3|36|0
3|12|0
1|1

The required expression is therefore 110002110021.
```

2. To translate from any other system into the decimal.

Multiply the left-hand figure of the given number by the base of that other system, and add in the next figure at the right. Multiply the sum so obtained by the base again, and add in, as before, the next right-hand figure. Continue the successive multiplications until the last right-hand figure has been added. The last sum will be the given number expressed in the decimal system.

Example.—Translate 43021 of the quinqual system into its equivalent in the decimal.

$$\frac{5}{20 + 3} = 23$$

$$\frac{5}{115 + 0} = \text{PIS}$$

$$\frac{5}{575 + 2} = 577$$

$$\frac{5}{2885 + 1} = 2886 \text{ Answer.}$$

ARITHMETICAL OPERATIONS.

All the operations of arithmetic can be readily performed in any of the systems, and a little practice, with a clear head, would soon render one fairly an adept. We will give a few examples, say in the *quaternal* system.

Addition.

This, at first sight, looks crooked enough, but when we remember that one remove towards the left means a fourfold (not a tenfold) increase, it straightens itself out immediately. The sum of the first column (at the right) is nine, and that is (2×4) + 1, or two to be carried to the column of the fours, and one left for the column of units. The second column, including the

(Note.—In practice the adding will be done mentally.) It can be demonstrated that these Rules are exact for whole numbers, but the demonstration would require more space than we can afford. Fractions require a somewhat different treatment,

"carried" two, adds up to twelve, that is, three to be carried to the column of sixteens, and zero left over for the column of fours. Finally, the "carried" three being included, the third column foots up to thirteen, $= (3 \times 4) + 1$, that is, three for the fourth rank, and one left over for the third; so we have 3101 as a result.

Subtraction.

Here again a little of the *quaternal* spirit is required to help 120233 us see how 3 from 2 leaves 3. The secret, a very open one, is, 210133 that the one (1) which we "borrow" from the next left-hand rank is really *four* (not ten), which being added to the 2 makes six, from which we take 3, and so have 3 for a remainder. The same idea is to be kept in mind every time we "borrow" or "carry."

Multiplication.

3012 302	Don't forget that every <i>four</i> , in one rank, is to be carried as a unit to the next, and all will be well.
12030	
21102	1
2122210	

Division.

132)121110(312	If a decimal boy were to bring that as an exam-
1122	ple of division, we should suspect a leak somewhere
231	in the brain; if a quaternal boy did not bring
132	that result, we would mildly inquire "Why not?"
330	What we have to say about fractions will come a
330	little later.

Numeration as it was Among the Ancients.

Now that we have glanced at a few of the possible systems of notation, the question that may suggest itself is: What is the use of it all? Why lead us through a labyrinth of possible systems when we have an actual one in daily use? Kind, patient reader, please allow us to answer your question by another. Suppose you had just emigrated to some other planet inhabited by rational beings like ourselves, but who as yet were totally unacquainted with any arithmetic, though just beginning to feel the need of the science of numbers. Suppose moreover you had been called thither for the express purpose of being their teacher in that branch. Knowing all you know now, which of the possible systems would you adopt in starting the arithmetic of your new world? A wrong choice here would entail on you many a left-handed blessing for all time to come. Reflect now. Were you to adopt the unal system, the æons of time would be too short to figure up your market bills. The binal, as we shall see, would have to be condemned on account of its interminable fractions. The ternal and nonal would be even worse in this respect, and the quaternal and octaval very little better, although the expressions would be more compact. The quinqual, septimal and

undecimal are simply horrid in this matter of interminate fractions. What then? Why, try the next, the decimal system. Unhappily for us our ancestors did so, or rather they stopped, unhappily, without looking farther. How came they to do so? It is hard to tell, but it is believed that our decimal system owes its origin to the ten fingers of the human hands. We have all counted on our fingers more or less, and the very word "digit," used both for "finger" and for "numerical symbol," seems to confirm this belief. However this may be, it is about certain that the forms of our symbols are derived from the Sanskrit, although other derivations have been suggested, and that the decimal system, as such, came from the Hindoos to the Arabs, by whom it was introduced into Europe not earlier than the eleventh century.

Among the ancient Hebrews and Greeks the decimal system was indeed in use, but in a very imperfect form, and what knowledge they had of it, was probably acquired through their intercourse with India. For symbols they relied on the letters of their alphabets; but as the Hebrew alphabet contained only twenty-two letters, five more symbols were invented, in order to make three groups of nine each. For the same reason the Greeks added three new symbols. The Hebrews put these new symbols at the end of their alphabet; the Greeks put one at the sixth place, one at the eighteenth, and the third at the end. Given now these twenty-seven symbols, the method of using them was the same with both nations. The first nine letters were used for our 1, 2, 3, 4, 5, 6, 7, 8, 9; the second nine for our 10, 20, 30, 40, 50, 60, 70, 80, 90; the third nine for 100, 200, 300, 400, 500, 600, 700, 800, 900. In Greek usage an accent was placed over a letter when used as a numeral; when placed below the letter it increased its value a thousand times. M, used as a prefix, increased the value of a numeral ten-thousand times. Combinations were formed by placing these numeral letters in juxtaposition. For example, to indicate two-hundred and seventy-nine, a Greek would write $\sigma \delta \theta$, as if we were to write 200, 70, 9. Fractions were written, clumsily enough, by setting the numerator apart from the integer to which it belonged, and then the denominator a little higher up, as we write an exponent. They had nothing analogous to our decimal fractions.

The Romans seem to have got badly mixed. It is true that the idea of ten and its submultiple, five, runs through their notation, but the idea of position to determine the value of a symbol never worked its way into their brains. They used letters as numerals, all of which (except the unit, of course) are multiples of ten or five: thus, I = I, V = 5, X = 10, L = 50, C = 100, D = 500, and M = 1000; but the value is not based upon alphabetical order. Many attempts have been made to account for these symbols, but no completely satisfactory solution has been reached; at best, we have only plausible guesses. The I to represent I is natural enough, being a single stroke. The V has been supposed to be the half of an X; but the X comes from where? Echo answers, "Where?" This X has been very aptly called the crux, the cross, of the Roman notation. We have either read somewhere, or

dreamed, that the V as a numeral was derived from the appearance of the human hand held up, in which the five fingers point out radially, like a bunch of carrots, the thumb and little finger making an angle with each other of about 45°. Now, leave out the three middle fingers, for the sake of brevity, and the outline left is a perfect V. After that, the X is simply two V's placed point to point. The L may be the half of the old square form of C ((), and C was probably adopted as being the initial of Centum, a hundred; and M, in like manner, because it is the initial of Mille, a thousand. The ancient rounded form of M was like this: CIO; and one-half of this IO later on became D, or 500.

However all this may be, the Romans contrived, by means of repetitions and combinations of these numeral letters, to express whatever ideas they had of numbers. To do so, they not only employed their symbols additatively, but, strangely enough, in the case of I and X, subtractively also. When either I or X stood at the left of a number larger than itself, it was to be subtracted, as V = 5, but IV = 4; X = 10, but IX = 9; and XL = 50 - 10 = 40; but, VI = 6, XI = 11, LX = 60, etc. Another element of confusion was introduced by such forms as IIX = 8, XIIX = 18, XXC = 80, etc.

The Roman schoolboy must have had a hard tussle in his arithmetical work with such an insane notation, and was doubtless glad when the time came to exchange his stylus and tablet for a sword and shield.

Such was, in outline, numeration among the ancients.

Numeration as it is among Ourselves.

The so-called Arabic, or decimal, system of numeration, which found its way into Europe six or seven hundred years ago, was certainly a vast improvement on the Hebrew, Greek, and Roman systems. It had, indeed, so much to recommend it, that it won its way through nearly the whole civilized world. Besides this, during the past hundred years a strong effort has been continuously applied, in certain quarters to make it the basis of all measurements, i.e., to make all our measures and weights, whether of solids, liquids, or gases, start from one common standard, and to have all the multiples and submultiples of that standard arranged according to the decimal scale. The French metric system is the realization of this idea, and receives its name from the chosen unit of length, the metre. This system has been adopted and made obligatory, in France, Prussia, Italy, Spain, and in some minor countries; but, although rendered legal in Great Britain in 1864, and in the United States in 1866, it has never taken root among English-speaking nations. That it has not, shows conclusively that there is something radically wrong with the decimal system itself. Just in what that wrongness consists will presently appear. We are not sorry, then, that the decimometric system has failed to establish itself; not, indeed, that we are in love with our own barbarous standards of weights and measures, which are so bad that human ingenuity could hardly have invented worse, but because we are convinced that infinitely better can be done; and that better will consist in throwing over the whole concern, the decimal system of numbers included, and in putting in place thereof, the duodecimal system. We can then, with very slight, and surprisingly few changes, bring all our weights and measures of every kind, with their multiples and subdivisions, into strict correspondence with the base of our system of notation. The saving in time and labor with a duodecimo-metric system would be simply incalculable, and men and nations yet unborn would look back and bless us for having delivered them from the thraldom of the decimal.

T. J. A. FREEMAN, S. J.

[Greatly to our regret the space occupied by preceding articles compels us to exclude from this number of the REVIEW the remainder of Father Freeman's very valuable and important paper, in which he clearly shows the great superiority of the duodecimal system of enumeration over the decimal, in facilitating accurate scientific calculations, and also in practical business arithmetic. The subject will be resumed by Father Freeman in the next number of the REVIEW—ED.]

Book Notices.

LETTERS OF ARCHBISHOP ULLATHORNE. Large 8vo., cloth, pp. 550. London: Burns & Oates. New York: Benziger Brothers.

Cardinal Newman has well said that a man's life is best found written in his letters. Archbishop Ullathorne was an extensive letter writer, and the editors of this volume have selected so well from a correspondence beginning in 1842 and ending in 1889, that a just notion may be gathered of the mind and character of the writer.

Archbishop Ullathorne was an active, learned, pious churchman, during an important half century of the Church in England, and his connection with men and measures, together with his estimates of them, as told in his correspondence, makes useful and interesting reading. The sequence of events is generally nicely preserved, because for the most part the letters are arranged in chronological order. The editors originally intended to print only distinctively spiritual letters, assuming that those who would read the letters would also read the Archbishop's excellent autobiography, but they changed their minds and made the collection general. It is well they did so. It is hardly fair in preparing a book for the press to assume that every one has read a preceding volume with which it has no necessary connection, or to compel readers of the second volume to go to the first for explanations. According to the present arrangement, those who wish to read the life of Archbishop Ullathorne may do so either in his autobiography or in his letters.

A great many of these letters are addressed to religious communities of women, or to members of them, and they are full of wise spiritual direction on all the virtues of the spiritual life. The writer had introduced several communities into his diocese, and he often said that a

bishop should be a true spiritual father to nuns. They were the object of his peculiar and devoted care, and the day before he died, when his death was momentarily expected, he said slowly and solemnly: "I have been thinking that if there is anything in my life that may induce God to have mercy on me, it is that I have never forgotten to take care of His nuns."

His letters from Rome, while attending the Vatican Council, are very interesting, although they do not deal with the controversies of the occasion at all. There are some interesting word pictures of the public ceremonies, and the rest is devoted to short descriptions of persons and places in Rome or near to it. He gives an unusually interesting sketch of the life and death of Bishop Grant, for so many years rector of the English College at Rome. Indeed, the sketch, though brief, is quite complete. Archbishop Ullathorne consecrated Cardinal Manning, and there are several interesting letters to that distinguished prelate.

He speaks highly of Father Faber's book on the Blessed Sacrament, calling it a most profound book and a complete course of theology, both on the Trinity and Incarnation, Grace and the Blessed Sacrament. He adds that it is written with brilliancy and eloquence.

He seems to have been endowed with the spirit of prophecy when he said, after the final surrender of the French forces to the Germans in 1870: "A republic in France means the government of the lowest set of unbelievers."

The archbishop found time in the midst of his many dioceses and labors to write several books and pamphlets. We can understand how constantly he worked when we read in one of his letters that, while engaged in writing a reply to Gladstone's work called, "The Vatican Decrees in their Bearing on Civil Allegiance," he devoted to it ten hours a day for fourteen days. The result was a pamphlet of eighty pages. His opinion of Gladstone was not complimentary. He applies to him a passage in Gonzales to the effect that a man who is constantly making fine speeches is never a good ruler. He sums up his estimate of him in this way: "My theory of Gladstone is, that if his head is ever anatomized, there will be found an ossification between the religious and the political lobes of his brain. They never can come together."

His analysis of Carlyle is even more brief and comprehensive. He says: "Carlyle is a great pagan philosopher, superinduced on a baptized Christian."

In his old age he read nearly all of George Eliot's books, and he speaks thus of her work: "Her books are certainly wonderful in their analysis of human motives, and of natural virtues as well as vices, and most happy in expression. . . . Their knowledge of human nature is wonderful in matter and expression; their ignorance of the supernatural is amazing. . . . This is one of the most insidious evils of her books, that what grace alone could accomplish is invariably ascribed to he working of nature. . . . They are unhealthy in tone, owing to the mind from which they sprang." His criticism of a late popular novel is not more favorable. He says of "Robert Ellsmere": "It is a vile book, on which Gladstone was foolish enough to write an article."

For several years the Archbishop and that gifted writer, Kathleen O'Mara, corresponded with each other. Even long before they met, he had recognized her genius in her letters, and they admired each other. This series of letters contains some beautiful thoughts.

He had an exalted idea of literature. He never accepted money for his writings. These are his words: "On principle, I never accept money for my writings. The making a trade of writing has corrupted

all literature. It is quite a modern thing, some 200 years old. No man ought to balance the fruits of intellect against money. There is

no proportion between the two things."

Wonderful changes took place in the Church during the Archbishop's active life. Speaking on this subject, he says: "I have certainly seen wonderful changes in my day, both in the expansion of the Church in this country and the transmutation of the doctrines of Anglicanism. But the most remarkable thing that I have witnessed is the expansion of the Church in Australia. When I arrived in that country, in 1833, there were but three priests, whilst now there is a Cardinal Archbishop, four archbishops, twenty-two bishops, and nearly one thousand priests."

It seems to us, however, that the most delightful part of this delightful book is that which tells of the long friendly relations between Archbishop Ullathorne and Cardinal Newman. The cardinal's first public appearance as a Catholic was made on the occasion of Archbishop Ullathorne's consecration. The archbishop appreciated highly the cardinal's great learning and piety, and he did much by his kind words to encourage the more timid spirit. On all important occasions, upon the appearance of a book, the elevation to new dignity, the establishment of a new house, by letter or a personal visit, the archbishop expressed his appreciation. He was very instrumental in procuring Dr. Newman's consent to accept the position of cardinal. The fear of being compelled to spend the latter part of his life in Rome; the thought of the pomp and expense attached to the new office, frightened the simple old man and prompted him to decline the new dignity. Archbishop Ullathorne quieted all his fears, and by judicious correspondence with Dr. Newman and with the authorities brought about that nice understanding which made the child a cardinal, and gave to the world a cardinal child.

It was in connection with this matter that the Archbishop wrote, "How few persons comprehend a genius! You have only, however, to take into account that the child's intuition, sensitiveness, and simplicity are carried through the life of the man, and the thing is done." He thus speaks of Cardinal Newman's feelings after his elevation: "The cardinal in his life has had many depressions, but now, as he him-

self remarks, the cloud is lifted."

It is hard for worldly, ambitious persons to understand the worth of humility. But surely there is no safer test of worth and greatness. Cardinal Newman understood this, and in a letter written by Archbishop Ullathorne August 18, 1887, we have a proof of it. He says: "I have been visiting Cardinal Newman to-day. He is much wasted, but very cheerful. We had a long and cheery talk, but as I was rising to leave an action of his caused a scene I shall never forget, for its sublime lesson to myself. He said in low and humble accents, 'My Dear Lord, will you do me a great favor?' 'What is it?' I asked. He glided down on his knees, bent down his venerable head and said, 'Give me your blessing.' What could I do with him before me in such a posture? I could not refuse without giving him great embarassment. So I laid my hand on his head and said: My dear Lord Cardinal, notwithstanding all laws to the contrary, I pray God to bless you, and that His Holy Spirit may be full in your heart;' as I walked to the door, refusing to put on his biretta as he went with me, he said: 'I have been indoors all my life, whilst you have battled for the Church in the world.' felt annihilated in his presence; there is a saint in that man."

But we could go on quoting almost indefinitely from this full storehouse of good things. The book is delightful and instructive, not only on account of the great amount of spiritual instruction that it contains, but also because of the glimpses that it gives of the great and good men of the times. It is a book that one can take up for five minutes or an hour with the assurance of finding in it something interesting. It is a book that will live.

A FORMULARY OF THE PAPAL PENITENTIARY IN THE THIRTEENTH CENTURY. Edited by Henry Charles Lea, LL.D. Philadelphia: Lee Brothers & Co. 1892.

The MS. here published was obtained by Mr. Lea from a bookseller in Berlin, "who," he says, "can tell me nothing of its provenance save that it formed part of a purchase made in Italy in 1889. It occurs at the end of a volume entitled 'Forme curie romane super beneficiis et questionibus,' and consists of fifty unnumbered pages on fine vellum." The title, as given by the original writer, is "Forme Romane curie composite a Magistro Thomasio bone memorie presbytero Cardinali super casibus penitentie." Mr. Lea suggests, as the most probable identification of the compiler, the name of Jacobus Thomasius Gaetanus, a nephew of Boniface VIII., who was cardinal-priest of St. Clement's from 1295 to 1300. Whether this surmise be correct or not, the compilation is evidently the work of some official connected with the Panitentiaria. It is a neatly arranged collection of decisions rendered by the supreme tribunal of Penance, and designed to furnish precedents and forms for the

expediting of similar cases.

The tribunal of the Panitentiaria is the medium through which the Supreme Pontiff exercises the power committed to him by Christ of loosing, of forgiving sins and remitting the penalties due to sins. Through it the Pope, as supreme and universal Pastor and Confessor, solves intricate cases of conscience, grants pardon to the repentant sinner, and relaxes in individual instances the rigor of general laws. The power of dispensing and pardoning is so essentially included in the primacy, that it is impossible to conceive of the one without the other. There is not the slightest indication to be found in this collection of any consciousness upon the part of the Holy See that a "newly-established papal autocracy" was in process of "consolidation and perpetuation." The principle which underlies all the applications for pardons and dispensations, and the granting of them, is the easily comprehensible one that to the supreme power in the Church is reserved the prerogative of dealing with violations of general laws. A large proportion of the cases before us deals with instances in which irregularities had been incurred. Irregularity, in the canonical sense, is ineligibility to ecclesiastical office, or, in the case of incumbents, incapacity for performing ecclesiastical functions. As might have been expected from a mediæval document, the first category of cases concerns the sin of simony. By a strict and general law of the Church, this sin rendered all concerned irregular, and the only remedy was a penitential recourse to the Holy See. It is edifying to observe, and it has been noticed by Mr. Lea himself, how delicate the consciences of mediæval Catholics were in this matter. Even when a benefice had been obtained through simony of friends or parents without the knowledge of the incumbent, recourse had to be made to Rome, and only in exceptional cases was a dispensation

Take the following (No. 10) as an illustration. It will be observed that, as usual with the Roman Penitentiary, the name of the petitioner

is carefully withheld.

"To the Bishop of Bologna: We learn from your letter that the bearer of this, having formerly through the simoniacal practices of his parents obtained possession of a certain church, had recourse to the Apostolic See, and on the strength of a letter from you, in which you prayed that a merciful dispensation should be granted to him on account of his ignorance of the crime, he was permitted, upon resigning into your hands the church thus obtained, to exercise the orders already received. However, you hesitated to restore him to said church, though his conduct had been irreproachable; and you have sent him back to us, in order that he might receive more abundant favor from the provident care of the Apostolic See. We, therefore, having read your commendatory letter respecting him, commit the matter to you, with authority, if evident utility or urgent necessity demand, that you by dispensation admit him de novo to his church, provided there be no other canonical objection."

We have quoted this case fully, for it is a typical instance of the wisdom with which the Holy See has at all times tempered justice with mercy. Mr. Lea, blinded with prejudice against everything Roman, draws from this and from similar interventions of the Holy See the very opposite conclusion. In his eyes, the Sacred Penitentiary was a moneymaking invention. "Of course," he says, after uttering this astounding calumny, "in the Formulary here printed there is no direct evidence of all this, for the very nature of the letters addressed to the prelates of the culprits precludes any allusions to such traffic, but the internal evidence In rubrics vi. to xi, the difference in the orders of restoration to benefices resigned on account of simony is strongly suggestive of difference in the liberality of the several penitents. Equally suggestive is the almost uniformly favorable character of the decisions which, except in cases involving heresy or opposition to papal authority, lean to the side of mercy, reckless of the damage to morals and discipline. In many cases, indeed, bribery is the readiest explanation of the uncalled for lenity shown."

It would surely be time wasted, if one undertook to argue with a man so utterly impervious to reason. There is not in this entire collection of decisions of the Roman tribunal, nor anywhere else we know of, an instance in which the Catholic Church was guilty of the crime of simony, the crime which she has bitterly opposed ever since St. Peter confounded Simon Magus. As for the absolution of those who were in any way culpable of this or any other crime, her doctrine and practice have been ever the same, viz., to receive the prodigal child with mingled gentleness and severity. It was extremely seldom that the Pope himself gave absolution; in the vast majority of cases, the guilty party was remanded to his bishop, with a document empowering the latter to absolve, if the penitent were truthful and otherwise well disposed.

The author would have spared his reader the thirty-eight pages of vituperation of Rome, with which he chooses to introduce this Formulary to the world, if he had been able to make a distinction between the Roman Penitentiary and the Roman Chancery. The granting of bishoprics and benefices was no part of the Cardinal Penitentiar's functions. His office was to forgive sins in reserved cases. These reserved cases were those violations of the general laws which entailed excommunication or irregularity. Hence, in this compilation, the first thirteen rubrics refer to cases of simony. Next follow cases of persons who had been excommunicated for slaying or striking clergymen. Then come the different cases of irregularity incurred from various causes. The procedure of the supreme tribunal is invariably the same—to uphold the law, unless some strong mitigating circumstance may have intervened to persuade a relaxation. The most of these cases were referred to Rome

by the bishops; whenever the facts were not obtained by letter from the bishop, the culprit was referred to him for examination, and absolution after a suitable penance. We have no intention of following Mr. Lea in his anti-Roman tirade, a rambling diatribe which confutes itself by its own virulence. In view of the severity with which the Holy See deals with culprits throughout this collection, it is amusing to hear Mr. Lee inveigh against Roman "lenity." If it had suited his purpose, he might have just as easily attacked the Penitentiary on the score of sternness. Whilst we must thank the author for having brought this interesting work to public notice, we must regret that he saw fit to inflict his Introduction upon us. It is no credit to American "science," but may be useful to anti-Catholic scribblers of tracts.

Sound and Music. By the Rev. J. A. Zahm, C.S.C., Professor of Physics in the University of Notre Dame. Chicago: A. C. McClurg & Co. 1892.

The long contest waged between the exclusively classical curriculum in our colleges and universities, and the youthful but vigorous claimant to academic recognition known by its comprehensive title of "Natural Science," has resulted in the steady victory of the latter. It first of all demanded but a modest share of the attention of collegians; but once installed in the home of ancient traditions it has silently but surely pushed its way forward to a position of commanding eminence. It has certainly "come to stay," if not, indeed, to dominate, in the not distant future, the old course of study. Whether the changes wrought by its introduction and the power which its present conquests prophesy for the future, be wholly agreeable to those who look for the best good of students, may be a very debatable question. It has been, and is still, debated hotly; and we call attention to the silent revolution going on in the curriculum of studies in our colleges, not for the purpose of argument, but merely to point to the fact of its rapid progress. Time has abundantly satisfied the pleadings of Huxley and the prophecy uttered by Tyndall in the preface to the first edition, published in 1867, of his now classical work on Sound: "There is a growing desire, says that distinguished scientist, "for scientific culture throughout the civilized world. The feeling is natural, and, under the circumstances, inevitable. For a power which influences so mightily the intellectual and material action of the age could not fail to arrest attention and challenge examination. In our schools and universities a movement in favor of science has begun which, no doubt, will end in the recognition of its claims, both as a source of knowledge and as a means of discipline." But this is not the only victory of Science—(we courteously employ its self-assumed title, rather than the argumentative one of "natural disciplines")—nor the only prophecy of its future domination. The "University Extension Course" reminds us that, it has a large clientèle among the masses of this much-reading generation.

Now while this peculiar educational movement has grown to such proportions that it cannot be thwarted, it may at least be directed into safe courses. The chair, the rostrum, the magazine, nay, the daily press, seem too often delighted to discern in its progress a menace to revealed truth, and have, alas! too often used it as a ready weapon against divine faith. The position best open to the Catholic apologist in such a movement is, it seems to the present writer, to forestall bigotry and incredulity by the rational process of furnishing the reading public with books on scientific subjects which shall present the simple facts of science without coloring of disputation, and in a popular, in-

telligible, readable style. If the people must be fascinated by science, let them gratify their yearning in books free from inuendoes, slurs, cheap declamation, and false logic. But in order to create such a scientific literature as shall at once appeal to the popular taste, and be free from the intangible coloring and distorting of facts so common to scientific writers of our day, it will be necessary to have works which, in point of the general scholarship, scientific attainments and agreeable literary style of the writers, and of the inviting typography of the volumes, shall not fall below the present standard of popular scientific publications.

In view of all these requirements we can find matter only for gratification in such an excellent installment as "Sound and Music" in the literature of the movement we have been describing. The general scholarship of Father Zahm, even if it were not known to the public in the writings he has already published, would be evident from the perusal of this latest work. His scientific acquirements need no comment. In the preparation of his book he has availed himself of the valuable assistance of Professor Mayer and Dr. Kænig-a name of very distinguished eminence in the department of acoustics. Father Zahm's literary style combines agreeableness, raciness, and strong idiomatic English. With regard to the typography we have only to say that its faultless elegance even exceeds the high standard of the volumes issued by Messrs. McClurg & Co., which have come under our notice; while the numerous illustrations are the best we have seen in any similar work, and the binding is strong and attractive. We can therefore safely recommend the work in all desirable respects.

Although suggested by a course of lectures delivered at the Catholic University of America at Washington, it includes the results of so much revision and addition as to prove practically a new work. It retains, however, the lecture form, and in so doing preserves, like Tyndall's "Sound," the vivacity and attractiveness of the spoken word. While giving to the reader the latest experimentation and the latest discoveries and theories in an exceedingly interesting department of Physics, and showing in extenso the physical relationships existing between Sound and Music, it does not yield to scientific dryness, but presents its subjectmatter in a dress of good, expressive English, adorned with pleasing illustrations drawn from the history of acoustics, from mythology, philosophy, and poetry. The interest of the reader cannot flag in such a

delightful presentation of the subject.

The style the author has adopted will recommend it to the study of those for whom he principally intended it: "The main purpose of this book is to give musicians and general readers an exact knowledge, based on experiment, of the principles of acoustics, and to present at the same time a brief exposition of the physical basis of harmony." A very copious index facilitates reference to the many topics discussed in this volume of over 400 pages. The author's discussion of the subjects of Equal Temperament, Pure Intonation, and the Pythagorean Scale as compared with our modern diatonic scale, will be found instructive and suggestive. We are glad to observe that in the demonstration of the relationships between the vibrations recognized as Sound and the æsthetic appreciation of a certain succession or combination of sounds as Music, the author bases his inferences on a strictly scientific view of the various phenomena of sound. And so, he apparently considers, with M. Fétis, that our diatonic scale is not founded on some law of nature, but is purely conventional. In so doing he can well avoid entering into the vague subtleties of the musical theorist, who

must see in the æsthetic influences of melody suggestions of its physical basis in some hidden order of nature. The question, "What is Music?" has been answered by the theorist in many cosmic relations. Mr. Rice, in his little book bearing that title, prefaces his own theory with some account of the answers to be found in the mythology of the Chinese, Hindoos, Greeks, and in the theories of Euler, Herbert Spencer, and Helmholtz. But whatever view be asserted, it should take cognizance of the patent historical fact that scales differing most widely in the constitution of their intervals have, nevertheless, exercised the greatest æsthetic influences on different peoples. This could scarcely happen if the order and intervals of our modern diatonic scale, or of the Pythagorean, had a clearly defined basis in some natural law. But while modern science cannot assert such relationship between any scale and nature, it can furnish a very plausible explanation of the different æsthetic effects of consonances and dissonances, and can suggest the propriety of introducing a new factor in harmony—the sub-minor seventh, concerning which the author thinks that "in the music of the future it way be reckoned as a consonance" (p. 400).

St. Peter and the First Years of Christianity. By the Abbe Constant Fouard, Translated from the Second Edition with the author's sanction, by George F. X. Griffith, With an introduction by Cardinal Gibbons, Pp. 422. New York and London: Longmans, Green & Co.

In the rapid development of English Catholic literature, great attention has been paid to the Prince of the Apostles. About that sacred figure has grown a literature in our tongue, which seems to participate in the impregnability of the very Rock itself on which the Church is founded. Witness the great and unanswerable works of Kenrick, Allies, Palmer, Murphy, Livius and a host of other treatises, large and small—all devoted to this special theme. These works have for the most part, however, a special end in view. They are controversial in their character, defending from the Scriptures, tradition and ecclesiastical history the position which St. Peter and his successors occupy by divine right in the constitution of the Church as founded by our Lord—and are mainly directed against the attacks of Protestant writers and teachers. department of English Catholic literature can now fairly be considered as complete. The prerogatives of St. Peter and his successors in the See of Rome have been nobly defended in works accessible to English readers of every class. One work, perhaps, is still needed for the completion of Petrine controversial literature, and that is a critical and exhaustive treatise on the duration of St. Peter's residence at Rome.

The work of the illustrious author, then, appears at a happy time in its English form, and crowns our Petrine literature with the pages of peace. Controversy is not found in the body of the work, and the little that appears in the brief appendix in no way interferes with the irenic character of the entire volume.

The work presents to us a picture of the Apostolic Church in its surroundings, with St. Peter in the foreground. There are master sketches of a number of the great representatives of the Apostolic age, St. Peter, St. Stephen, St. Philip, St. Paul, St. Matthew and his Gospel, and St. Mark and his Gospel. To the separate consideration of these great characters a large portion of the work is devoted, and each special chapter is complete in itself, filled with historical instruction and replete with the conclusions derived from the learning and research of the author.

Intermingled with these chapters is another series treating upon the environments of the apostolic Church. Probably no more instructive

and interesting chapter can be found in the volume than is the one of twenty-eight pages on "The Jews of the Dispersion" and their influence upon the surrounding pagan world—sowing the Messianic seed which was soon to spring up into a great spiritual harvest under the Christian Apostles. Hardly less graphic and attractive are the chapters on the moral condition of the pagan world, on Antioch, on the Religion of Rome, on the Conduct of Life under Augustus, and on the Stoics of the Empire.

Vivacity, brilliancy at times, pervades the entire volume. There is no dulness to be found in the pages. As his Eminence, Cardinal Gibbons, writes in the introduction: "Jerusalem, Rome, Antioch, are no longer to us mere names recalling only faint images of ancient cities. We see them; we walk their streets, we catch the voices and the thoughts of the crowds that throng them; we watch with wonder the divine seed as it springs to life and spreads and flourishes amid the worst forms of

moral decay.

The perfect and elegant English diction abundantly proves the talents of the translator, and we congratulate him upon his energy and tact in selecting and giving to the English readers two such works as "The Life of Our Lord" and the present one in so short a time. We hope that he will also add the third work, that on St. Paul, on which Abbe Fouard is at present engaged.

THE MANNA OF THE SOUL; or Meditations for Every Day in the Year. By Father Paul Segneri. New York, Cincinnati and Chicago: Benziger Brothers.

We heartily welcome this second edition of Father Segneri's work—The Manna of the Soul—now presented to the American public. Hardly necessary is it to state that the learned and holy author's name occupies a prominent place among the standard writers on spiritual life. His works have long since been translated into all the European languages; and through many editions, regularly coming from the press, have attained a widespread popularity over the continent of Europe—a true testimonial to their merit.

The title of the two volumes under notice is in itself suggestive of a series of meditations for every day in the year. Manna, the heaven-sent daily bread which supported the Israelites during their sojourn on the dreary, unfertile wastes of the desert, is a figure of holy meditation, the daily food of the soul, supporting it on its pilgrimage to eternity, giving it renewed vigor amidst the ceaseless war with the passions. Each meditation of the work is founded upon some text of Sacred Scripture, the selections embracing quotations from all the books, both of the Old and the New Testament. The writer, in the preface, says: "To manna was given in Holy Writ the name at one time of 'the Word of the Lord'; at another, of 'the Word that goeth forth from the mouth of God.' In order, then, that I might be able to apply to your soul this life-giving restorative, I came to the determination to put together such a supply as would be sufficient to feed you for the entire year."

Not only are the points of consideration taken from the Scriptures; but the deductions and conclusions are, for the most part, clothed in Scriptural texts. To preachers, therefore, the work will be found invaluable, as the many apt citations of the Word of God, with their mystical inferences, cannot fail, if deeply pondered and permanently fixed in his mind, to be of lasting use in the composition of discourses for the faithful. Unlike many other books of meditation, "The Manna of the

Soul" is not burdened with too frequent allusions to the observance of rules of community life, but like the manna, "suited to what every man liked," is adapted to all conditions and states of life. We trust that this second edition will be well received by both clergy and laity and thus its aims of leading souls to higher perfection will continue to be fulfilled.

A CHRISTIAN APOLOGY. By Paul Schanz, D.D., D.Ph., Professor of Theology at the University of Tübingen. Translated by Rev. Michael F. Glancey, Inspector of Schools in the Diocese of Birmingham and Rev. Victor J. Schobal, D.D., Professor of Dogmatic Theology at St. Mary's Oscott. In three volumes. Vol. III. The Church, 1892. New York & Cincinnati: Fr. Pustet, Printer to the Holy See and the Sacred Congregation of Rites.

If not the most important, we have no hesitation in saying that this third and last volume of Dr. Schanz's work will prove to many the most

interesting, perhaps the most profitable,

"Finality and Development of Christian Revelation." "The Kingdom of God." "The Church According to Scripture." "The Church Apostolic." "The Church One." "The Church Catholic." "The Church Infallible." The Church Necessary for Salvation." "The Church Holy." "Scripture and Tradition." "The Primacy of St. Peter." "The Primacy of the Pope." "The Infallibility of the Pope." "The Church and Civilization." These are the subjects whose treatment forms the contents of this third volume. As we have said, we do not hold them to be more important than the questions treated in the two preceding volumes; yet, because of their nearness to us; because, if we may so put it, they are present living questions, bearing, in greater or less degree, upon our daily lives, they will appeal to many with keener interest.

How well, how learnedly and soundly the subjects of this volume are treated, we need hardly take pains to tell the reading public. The work of Dr. Schanz, which so honestly and ably has been given us in this English translation has long held the very highest place in German theological literature, and is clearly the most thorough, the soundest work of the kind in the English language. We especially direct the student's attention to the treatment of the "Primacy of Peter," of the "Primacy of the Pope," of the "Church Infallible" and the "Infallibility of the Pope." So ably, so minutely complete an exposition of those great questions we cannot recall ever having studied. We should like to see this great work condensed and then put into the hands of our ecclesiastical students. It would, we are sure, be a source of highest good.

The closing chapter—The Church and Civilization—of this great work is a most happy, most admirable climax to the magnificent treatise, bringing before us, as it does, in most vivid realization, the living, concrete work of the Church among men.

BLESSED LOUIS MARIE GRIGNON DE MONTFORT (Missionary Apostolic, Founder of the Company of Mary and the Daughters of Wisdom) and his Devotion. By a Secular Priest, author of a translation of "The Virgin Mother of God; or, the Marian Writings of St. Bernard," "Tauler's Meditations on the Life and Passion of Our Lord, Etc. Vols. I, and II. London Art and Book Co. New York, Etc.: Benziger Bros. 1892.

This is a very delightful work. It is the story, beautifully told, of as sweet a life as ever lived on this earth. It is, moreover, at the same time, a splendid treatise on devotion to the Mother of God. Not that it sets itself up for such, but from its necessary dealing with the won-

drous union that existed between the subject of its pages and God's Mother. The work is written with far more than ordinary ability. We commend it to Catholics generally. We should like to see it in the hands of our Catholic laity, feeling assured that it would be conducive to great and far-reaching good. To the priest and religious it will be a source of strength and consolation. The story of lives such as Blessed Louis Marie's comes to us like voices from heaven for our encouragement

CONSTITUTIONES DOGMATICÆ SACROSANCTI ŒCUMENICI CONCILII VATICANI EX IPSIS EIUS ACTIS EXPLICATÆ ATQUE ILLUSTRATÆ. By Theodoro Granderath, S.J. St. Louis: B. Herder. \$1.35 net.

In the interpretation of all laws, and particularly of doctrinal laws of the Church, it is very important to study the sources from which the laws are drawn. As the author of this book well says, there would not be so much difference of opinion among theologians about certain decrees of the Fourth Council of Lateran and the Council of Trent, if we had at hand the sources whence those decrees were drawn, the original drafts of them, the amendments that were proposed to them, and the discussions that took place in regard to them. All this information he gives about the Vatican Council, and he remarks that it is possible to do this for the Vatican Council more fully than for any other, because the necessary documents are in existence. The book is really a history of the Vatican Council for theologians, and the work is so well done, by an author so eminently qualified to do it, that it should certainly produce the result intended.

ZEAL IN THE WORK OF THE MINISTRY; or, the Means by which every Priest may render his Ministry honorable. By L'Abbe Dubois, Honoraire de Coutances. Translated from the Fifth French Edition by C. A. Comes de G. Liancourt. Second English Edition. New York, Cincinnati and Chicago: Benziger Brothers.

There is not room for two opinions about this work. It is thorough, comprehensive, and eminently practical, and is animated throughout with the spirit of Christian wisdom, prudence, piety and love.

SOCIALE FRAGE UND SOCIALE ORDUNG DER INSTITUTIONEN ODER GESELLSCHAFTS-LEHRE. Von Fr. Albert Maria Wesig, O.Pr. Theile I. and II., pp. 1026. Herder: St. Louis. 1892.

These volumes reach us too late for adequate review in our present number. We shall refer to them in our next. Meanwhile we recommend them to our readers as a thoroughly philosophical and Christian study of the elements and structure of human society.

BOOKS RECEIVED.

JESUS THE ALL BEAUTIFUL. A devotional treatise on the character and actions of our Lord. By the author of "The Voice of the Sacred Heart," and "The Heart of Jesus of Nazareth." Edited by the Rev. J. B. Macleod, S. J. London: Burns & Oates, Limited. 1892.

DIE GROSSEN WELTRÄTHSEL. PHILOSOPHIE D. NATUR. Von Tilmann Pesch, S.J. Zweite, Verbesserte, Auflage, Ersten Band, Philos, Naturerklärung. Pp. xxv., 799. 8vo. Zweiter Band, Naturphilosoph, Weltauffasung. Pp. xii., 616. Herder: St. Louis, 1892.

THE CEREMONIES OF SOME ECCLESIASTICAL FUNCTIONS. By the Rev. Daniel O Loan, Dean, Maynooth College. Dublin: Browne & Nolan. New York Benziger Brothers.



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THE AGE OF THE HUMAN RACE ACCORDING TOMODERN SCIENCE AND BIBLICAL CHRONOLOGY.

· PART I.

THE ANTIQUITY OF MAN ACCORDING TO ASTRONOMY AND HISTORY.

"around which a whole system of topics turns, is the topic of the antiquity of the human race." With the exception of evolution, which has a literature of its own and counts its volumes by thousands and tens of thousands, no other scientific subject, it may be safely asserted, has provoked so much discussion, as has the antiquity of our race. For a full hundred years the question of the age of the human species has engaged the attention of scientists and Biblical scholars, and yet, notwithstanding all that has been done in the various departments of knowledge, we are still very far from having definite information on many of the points in dispute.

Many causes might be assigned for the interest that has been manifested in the question,—an interest, which, far from subsiding, seems to enhance as time rolls on; but not the least potent has been, no doubt, the antagonism that by many was imagined to exist between the teachings of Scriptural chronology and the findings of modern science. For this reason, therefore, the question of the age of the human race is one that must interest the Biblical as well as the scientific student, and, in consequence, our modern Scriptural exegetists have given to the subject almost as

^{1 &}quot;Scriptural Questions," the Catholic World, p. 645, 1885.

much thought and study as have the most zealous votaries of science. The topic is certainly a fascinating one, and we are in no wise surprised that so many investigators have spent so much time in attempts at its elucidation.

Like all scientific subjects that are tinged with a human and a religious interest, it has a charm that no subject of pure science can ever possess. And until all difficulties bearing on the question are cleared up; until all doubts arising from the supposed conflict of science with Scriptural chronology are dissipated, and until it shall be demonstrated that there is and can be no difference of teaching by science on the one hand, and Scripture on the other, regarding the time man has existed on earth, so long will the question of the antiquity of our race continue to have, for many investigators at least, the paramount attraction that is now so notable.

Fully to appreciate the reason of the great interest which attaches to the study of questions like the one under discussion, and to understand the cause of the wide divergence of views of a certain class of scientists on the one hand, and of orthodox Scriptural interpreters on the other, regarding many passages in the Bible, especially in the Pentateuch, it is necessary to take cognizance of the influences which have contributed to the development of that pronounced form of Rationalism which is such a striking and dominant characteristic of our age.

In every age of the Church, Rationalism has been more or less prevalent. In the first centuries of her existence it was championed by Celsus, Porphyry, Hierocles and Julian the Apostate. In mediæval times Averroës and his followers were its chief coryphei. At the present time—and during the past hundred years, for that matter—the great stronghold of Rationalism is in Germany. But it would be scarcely true to say that the Rationalism, now so rampant, is an indigenous growth among the Germans. Luther did, indeed, sow the germs of free thought when he proclaimed his principle of private interpretation of the Bible; but neither he nor his countrymen seemed to realize the consequences to which this principle would logically and inevitably lead. It is more consonant with the facts of history to regard German Rationalism as an exotic, greatly developed and transformed, it is true, by reason of congenial soil and favorable environment, but nevertheless an exotic, transplanted from lands where the genius and temperament of the people, although in some respects similar to, are yet in others entirely different from, those of the Teutonic race.

The first to perceive the full significance of the principles laid down by the heresiarchs of the sixteenth century and the first to draw conclusions in accordance with the premises involved were the Deists of England. Lord Herbert, of Cherbury, is usually regarded as the father of English Deism. In his work on truth and revelation 1 published in 1624, he rejects revelation as useless and reduces Deism to a system. He soon had a large number of followers, and among them some of the keenest intellects and most famous wits of the time.

The noted materialist, Hobbes, although differing from Herbert in philosophy, shared many of his views on religion and morals. Among later Deists who contributed much towards sowing the seeds of doubt and free thought, and sapping the foundations of religion in Great Britain were Shaftesbury, Blout, Toland, Collins, Tindal, Morgan, Woolston, Chubb, Whiston, Somers, Shrewsbury, Buckingham and Bolingbroke.

Toland regarded Christianity as a superstition, and had no respect either for revealed truth or the principles of natural morality. Tindal followed in the wake of Lord Herbert, and with Morgan united in considering the religion of Christ but a forerunner of natural religion. To Woolston the miracles of the Gospel were mere allegories. He, accordingly, with Chubb, Whiston, Shaftesbury, and, above all, with Hume, made his onslaughts on these evidences of revealed truth. Collins and Craig directed their shafts against the prophecies of the Old Testament. All combined to assail the authority of the Sacred Scriptures, and the consequence was that many whose faith was wavering, soon found themselves deprived of the little they still possessed.

Natural religion and Rationalism were the first fruits of these persistent attacks on the Bible. But the work of religious disintegration was not to be confined to England. It was soon to affect France, and then Germany and other parts of Europe. During his enforced sojourn in England, Voltaire had found congenial associates among the leading Deists and free-thinkers of the day, and was not slow to imbibe their principles. As may easily be imagined, he was an apt pupil.

Of all the English Deists, Bolingbroke seems to have exerted the greatest influence on the "Sage of Ferney," and to have supplied him with much of the material with which he afterwards so violently assailed both the Old and the New Testament. But it was not argument that Voltaire employed in his assaults on Christianity, which at one time he egotistically fancied he could destroy, but refined derision and irony. A peerless master of epigram and endowed with a keen, penetrating understanding, he made the Bible and the Church the butt of his brilliant, flashing

¹ De Veritate prout Distinguitur a Revelatione, a Verisimili, a Falso.

wit and of his caustic and withering ridicule. Understanding thoroughly, as he did, the temperament of his countrymen, Voltaire was fully aware of the power of the weapons he employed. Nothing, he knew, would affect a Frenchman sooner than sarcasm or a well turned epigram, and accordingly, during his long and eventful warfare against Christianity, he never deviated from the plan of campaign which he first adopted. To say that he was not in a measure successful in his nefarious purposes would be to controvert history. The evil that he accomplished can never be estimated.

As Herbert was the father of Deism in England, so was Voltaire the father of Infidelity in France. But he was not alone in his attack on the Church and all that the French people, until his time, had revered as sacred. He was aided and abetted by a number of kindred spirits, like Diderot, Rousseau, Helvetius, Condillac and others, who by their writings generally, but above all by that monument of falsehood and impiety, the French Encyclopédie, made Infidelity fashionable and paved the way for the Reign of Terror.

From France the tidal-wave of free thought soon passed on to Germany, where it issued in forms of Rationalism and Materialism, Atheism and Nihilism, before which the world stood appalled.

The work of destruction was inaugurated by Samuel Reimarus, a professor of philosophy in Hamburg. He died in 1768, leaving a collection of manuscripts from which Lessing subsequently published numerous extracts under the title of Wolfenbüttelsche Fragmente eines Ungenannten.¹ Reimarus's production was a direct attack on the historical basis of Christianity, and opened the floodgates for the deluge of Rationalism which has since extended its ravages from the mouth of the Elbe to the Mediterranean, and from the Ural Mountains to the Irish Sea.

Prior to the time of Reimarus there had been exhibited in certain quarters a disposition to question the inspiration of the Scriptures; but the public was not yet prepared for the revolutionary teachings of Reimarus and Lessing. The illustrious Dutch jurist, Hugo Grotius, and the pantheistic Jew, Spinoza, had called in doubt some of the fundamental principles of theologians respecting Biblical interpretation and criticism; but their doctrines lay practically dormant until the eighteenth century, when their influence began to be felt throughout the length and breadth of Europe,—an influence which has continued unabated in power and extent until the present day.

¹ Vigouroux, La Bible et Les Deconvertes Modernes, Article, "Fragments de Wolfenbüttel,"

Luther repudiated tradition; Lessing, who has been called the Luther of the eighteenth century, repudiated the Bible, as a divinely inspired work. Thenceforward, Scriptural commentators seemed to vie with one another as to who could carry farthest the work of disintegration and demolition. Every book, every chapter, every verse, every word of the Old and New Testaments was submitted to the microscope of the "higher criticism." Every statement of Scripture was compared with the teachings of profane science, and declared true or false, according as it agreed or disagreed with the latest pronunciamentos of scientific thought.

The progress of Rationalism in Germany much resembled the advance of Deism in England. Good and pious men in their frantic endeavors to save something of supernatural religion from utter shipwreck, threw everything overboard until they found they had nothing but Natural Religion, which is but little more than Rationalism pure and simple. Such was the fate of Locke in his attempted answer to Lord Herbert, and such, too, was the fate of Semler, Henke and Ernesti, in their futile attempts to stay the torrent let loose by Lessing and Reimarus. They dissociated religion from theology, and fancied they could save Christianity by rendering it independent of Scripture.

The denial of the inspiration of the Bible was the first step towards the denial of Christianity. The second step was the denial of miracles, and this was made by Eichhorn and Paulus.¹ The latter was deeply imbued with the ideas of Kant, who, according to Lecky, was, with Lessing, the chief leader in Germany in the war against the Bible.³ The third and last step consisted in denying the authenticity of the Sacred Books, and this radical movement was made by the notorious David Friedrich Strauss. Under the pompous names of Biblical criticism, or critical theology, he brushed aside all that his predecessors had left of the Sacred Text, and made the negation of the supernatural one of his fundamental tenets. What for so many ages have been regarded as undoubted facts and truthful narratives were pronounced by the author of Das Leben Jesu myths and mythical legends.³

We have briefly traced Rationalism through its full course and found it to issue in Atheism and Nihilism. The doubts of Less-sing and the skepticism of Kant led to the negations of Strauss, and the pantheism of Hegel to the atheism of Feuerbach and Schopenhauer.



^{1 &}quot;Melanges Bibliques," Les Inventeurs de l'Explication Naturelle des Miracles, par F. Vigouroux.

² History of the Rise and Influence of Rationalism in Europe, vol. i., p. 289, et seq. ³ Cf. Einleitung of Leben Jesu; also, Introduction of Vie de Jesus, by Ernest Renan. See likewise Rawlinson's Historical Evidences of the Truth of the Scriptures.

According to these representatives of the most advanced German thought, the value and truth of dogma are to be estimated by its conformity with the latest results of scientific research. The principal dogmas of the Christian faith are belief in a personal God, the creation of the universe out of nothing, and the immortality of the soul. But these beliefs are not in accordance with the teachings of science, and are, therefore, false. Astronomy has driven God from heaven; reason has deprived Him of His court and taken from Him His Angels and His Saints. Geology and palæontology have demonstrated the falsity of the Mosaic cosmogony; linguistics and prehistoric archæology have shown the futility of Biblical chronology; and historical criticism has proved that the Old and New Testaments are nothing more than a tissue of myths and fables. Religion is a bugbear invented by a wily priestcraft; morality is a name for something that does not exist; law and order, restrictions on personal liberty which should not be tolerated.

Such is the last word of modern Rationalism; such the latest utterances of that science that has arrayed itself against the Bible, and against all forms of supernatural religion.

We are now in a position to understand—what would otherwise appear difficult, if not unintelligible—the attitude assumed by so many scientific men in the discussion of all questions that have even a remote bearing on the inspiration and the authenticity of the Scriptures, and on the evidences of revealed religion. They affect to have persuaded themselves, and they try to convince others, that the Bible is false; that Christianity is a concatenation of falsehoods, and that it is the mission of science and of men of science, to proclaim to the world the irreconcilable antagonism between revelation and science, between the teachings of religion and the latest conclusions of modern thought.

It must not, however, be inferred from the foregoing that there is any real antagonism between true science and religious dogma. Not only is this far from being the case, whatever modern rationalists may declare to the contrary, but—what is more—it is impossible. There are, indeed, discrepancies and antagonisms between the Protean theories of science and the teachings of faith, but this, from the very nature of the case, is inevitable. The doctrines of the Church are the expression of Truth itself, and, therefore, immutable. The hypotheses and the speculations which certain scientists set such store by, are as changeable as the colors of the chameleon and as short-lived as the May-fly. Such theories, so often foisted on a credulous world in the name of science are truly characterized in the words of the poet who speaks of

"Ephemeral monsters, to be seen but once!
Things that could only show themselves and die,"

What we wish specially to direct attention to is the *tendency* of modern science to inculcate Utilitarianism in morals, Materialism in philosophy, and Rationalism and skepticism in religion. True science and true scientists keep aloof from this tendency, but there are many students of Nature who are unconsciously affected by it, even when they are absolutely free from any preconceived notions in their special lines of research. They live in an atmosphere of doubt, and are imbued with the spirit of criticism and Agnosticism which is everywhere rampant. Contrary to their own principles, and in spite of themselves, they are forced into the current of Rationalism, and ere they realize it, they are engulfed in the maelstrom of Materialism or Pantheism.

For, strange as it may appear, and inconsistent as it really is, men of science who are so restive under authority, spiritual or religious, and who are wont to boast of perfect intellectual freedom, are often the greatest slaves to those who for the nonce are saluted as the hierophants of "advanced thought." The influence which Haeckel, Karl Vogt, Büchner, Oscar Schmidt, Paul Bert, Darwin, Huxley, Romanes, Spencer and others of their ilk, have over their followers, even in matters disconnected with the sciences which they profess, is evidence, if any were required, of the truth of this statement.

Contrary to what they assert, modern scientists are often more guided in their investigations by the magister dixit of some wild theorist than they are by the facts of science and the indications of Nature. This will explain the variations and contradictions which are so often palmed off on the public as veritable science, and account for the vagaries and absurdities that frequently constitute such a striking characteristic of some of our "advanced thinkers." What on one day obtains universal acquiescence, sinks on the next to complete rejection. For men of science, at least the majority of them, have yet to learn that when they leave the domain of Nature, where their researches should keep them, and enter into the region of speculation, they are, Icarus-like, courting certain failure, if not utter destruction. Their experience is sure to be like that of the Rationalistic school in questions of Scripture and religion,—the verification of the old saying quot homines tot sententiæ.

After this rather long preamble, we are now prepared to discuss the historical and the physico-Scriptural question of the antiquity of the human species, and to appreciate many of the aspects of the controversy which would otherwise be ill understood. It will be found that the variations in the history of heresies, so graphically described by Bossuet, are fully paralleled by the various phases assumed by the protracted and heated debate between Biblical scholars and scientists, regarding the character of Scriptural chronology, especially in its bearing on the always fascinating question of the age of our race.

The first serious onslaught, by men of science, on the Biblical chronology in its relation to the antiquity of man, was inaugurated in the latter part of the last century. The atmosphere was then impregnated with the poison of free thought and irreligion, and the minds of many, even good men, were in a condition of doubt and anxiety bordering almost on despair. It was a period of intellectual as well as of political revolution and anarchy; when the worst elements of society were in the ascendency and were bent on destroying thrones and altars, and removing the last vestiges of the ancient régime. Bayle, Voltaire, Rousseau, Condillac, Diderot, Helvetius, D'Alambert, had done their work. The "Encyclopædists," so it seemed, had conquered. Rationalism and Infidelity had triumphed. A new era was to be ushered in, and all traces of the past, in so far as the Church and religion were concerned, were to be consigned to oblivion.

The attack was made in the name of astronomy, and was led by some of the ablest minds of the age. A careful examination of the astronomical tables of the Hindus, it was averred, proved conclusively that the Indian astronomers had made observations on the heavenly bodies full three thousand years before our era, and had cultivated the science of the stars twelve hundred years earlier than their first recorded observations. In other words, it was contended that the Hindus had studied astronomy at least four thousand two hundred years before the Christian era; that, consequently, these people had an antiquity far in excess of that assignable by the usually accepted Scriptural chronology. Professor Playfair, the distinguished Scottish mathematician, in referring to these tables, discloses the animus which actuated himself and his confreres by the statement: "It is through the medium of astronomy alone that a few rays from those distant objects" (the primitive inhabitants of India) "can be conveyed in safety to the eye of the modern observer, so as to afford him a light which, though scanty, is pure and unbroken, and free from the false coloring of vanity and superstition."

It was not long, however, before it was demonstrated by some of the more prominent members of the Asiatic Society, notably Mr. Bently, of Calcutta, and by the celebrated French astronomer, Delambre, that the calculations of Playfair, Bailly, and their associates, were based on a myth. It was shown, beyond question, that the earliest reliable astronomical observations of the Hindus as given in their sacred books, do not date back farther than 1421 B.C., and that their oldest extant treatise on astronomy belongs to a period not earlier than 570 A.D.

Shortly after the excitement consequent on the discussion of the Hindu astronomical tables had subsided, a still greater sensation was produced by the finding, by some of the French savants who accompanied Napoleon to Egypt, of the now famous zodiacs of Denderah and Esneh. According to the calculations of certain astronomers and mathematicians, these zodiacs, as well as the temples in which they were found, had an antiquity utterly irreconcilable with any system of chronology that could be deduced from the facts and genealogies of the Old Testament.

The zodiac of Esneh, M. Nouet calculated, dated as far back as 4600 B.C., whilst M. Burkard's computations assigned it to a period about seven thousand years before our era. According to a writer in the Edinburgh Review, the zodiacs of Denderah could not "be referred to a period much later than three thousand eight hundred years ago," whereas that of Esneh was given an antiquity of "more than five thousand three hundred years." M. Dupuis went much further, and estimated that the temples, in which the zodiacs were discovered, must have a minimum age of fifteen thousand years. "I have," he exclaimed, with self-complacency, "cast the anchor of truth into the ocean of time." But, as the sequel showed, he was mistaken. His ocean of time proved to be an ocean of error.

"It was then," remarks a sagacious writer, commenting on the zodiacs, and the speculations to which they gave rise, "that science struck out into very bold systems, and the spirit of infidelity seizing upon the discovery, flattered itself with the hope of drawing from it new support." The enemies of religion and the Bible again raised a cry of victory, and gravely announced that the Christian chronology was a thing of the past.

But the shout of triumph, as in the case of the Hindu tables, was premature; for just when the infidels of France and England were rapturously singing their pæans of congratulation, a young man-a scholar and an explorer-arrived from Egypt, bringing with him incontestable evidence that the calculations which assigned such great antiquity to the temples and zodiacs of Denderah and Esneh were entirely illusory, and were utterly without foundation in fact. The young man's name was Jean François Champollion, the father of Egyptology, whose genius had unraveled the mysteries of the hieroglyphics that before his time disclosed as little regarding the past history of Nile-land, its monuments, and its inhabitants, as the Sphinx itself. He had studied the zodiacs in situ, and was able to demonstrate to the satisfaction of even the most critical that, far from having the hoary antiquity claimed for them, they did not antedate the first two centuries. They did not belong to the times of some of the earlier Pharaohs, as many stoutly maintained, but were put in place during the Roman domination in Egypt, and sometime during or between the reigns of Tiberius and Antoninus Pius.

The warfare waged in the name of astronomy against the Biblical chronology was a signal failure. But, nothing daunted, the enemies of the Church betook themselves to a new arsenal, from which they fondly hoped to draw more effective arms. These arsenals were the histories and literatures of certain of the Oriental nations, especially India, China, Egypt, and Assyria.

Hindu literature and history, whose vast treasures had just been opened up to European scholars, seemed to promise them all they could desire. The poems, mythologies, and the genealogical list of kings, as given in the Vedas, Purânas and Sûtras were carefully scrutinized and compared; but the results arrived at, when above mere conjecture, were far from reliable or satisfactory to those who were in quest of weapons which they could use against the Christian cause.

Sir William Jones, the great Orientalist, and certainly no friend of the Church, was the first to make a serious attempt to unravel the intricate web of Indian chronology. In his examination of Sanskrit records, he met with absurdities and contradictions innumerable, but still, far from despairing, he pursued his inquiries with a persistence and an enthusiasm that must extort admiration even from his bitterest adversary.

And what was the result of his investigations? One that was a grievous disappointment to the anti-Christian theorizers of his time, but one that was quite in consonance with the chronology of the Bible. Accepting as legitimate the conclusions of a prejudiced investigator, but one who was remarkably well qualified to give an opinion on the question under discussion, "we have the establishment of a government in that country [India] no earlier than 2000 years before Christ, the age of Abraham, when the book of Genesis represents Egypt as possessing an established dynasty, and commerce and literature already flourishing in Phœnicia." 1

Wilfort, Klaproth, Heeren, and others, continued the work inaugurated by Sir William Jones, and with essentially the same results. Heeren, after making a thorough examination of the Hindu writings, gives it as his opinion that "we cannot expect to find in them any critical or chronological history; it is one by poets composed, and by poets preserved." And so completely are the early annals of India involved in mythological fable, that Klaproth does not hesitate to bring down the commencement of true chronological history to a period as late as the twelfth century of our era.

¹ Cardinal Wiseman's Science and Revealed Religion, vol. ii., p. 33.

The erudite Lassen, as the fruit of most laborious and extended researches in Indian history and literature, arrives at conclusions which admirably harmonize with those of his predecessors whom we have just named. He places the date of the establishment of regular government in India somewhere between 2000 and 1500 B.C., a date quite in keeping with even the most conservative system of Scriptural chronology.

According to some of the most recent authorities on the subject—Kruse and Littré, for instance—none of the Hindu records deserve the name of history. They are enveloped in a poetical mantle of myth that utterly precludes any determination of time, or the establishment of any date which could serve as a certain basis of a system of chronology that would be even approximately correct.

According to Max Müller, the oldest of the Vedas, which are the most ancient monuments of Sanskrit literature, belong to a period not anterior to twelve or fifteen hundred years before the Christian era. For a long time the Laws of Manu—the Manavadharma-sastra—were, like the Vedic hymns, supposed to have a venerable antiquity. Sir William Jones fixed their date at 1280, and Elphinstone at 900 B.C. The learned Oxford philologist, in referring to them, says: "I doubt whether, in their present form, they can be older than the fourth century of our era; nay, I am prepared to see an even later date assigned to them. I know this will be heresy to many Sanskrit scholars, but we must try to be honest to ourselves." 1

The utter impossibility of constructing anything like a chronological history of India from the materials supplied has been fully acknowledged by one who was singularly well qualified to express an opinion on the question. We refer to the distinguished scholar and Orientalist, M. Barthélemy Saint-Hilaire. Writing in the Journal des Savants, in reference to the subject we are now considering, he declares that everywhere in the world of India, except in Ceylon "history is entirely absent, or if it tries to show itself, it is so disfigured that it is absolutely unrecognizable. Who in the legends of the epic poems, the Brahmanas, the Puranas, is able to discover an historical tradition? Is it possible, even according to the most liberal system of interpretation, to extract therefrom anything precise, anything real? The most important events of Brahmanic society are obscured by an impenetrable darkness which time intensifies instead of diminishing. In spite of all our erudition, so powerful and so sure, we must despair of resuscitating that past which was annihilated by the very ones who were its chief

¹ India: What it Can Teach Us. Lecture iii.

actors. India has not willed to awake from her dreams; we cannot historically call her from her tomb."—March, 1866,pp. 164–165.

A careful study, therefore, of the astronomy, the literature, and what there is of the history of the Hindus leads us to the same conclusion at which the learned Cardinal Wiseman arrived more than a half a century ago. In his admirable lectures on "The Connection between Science and Revealed Religion,"—which, notwithstanding the remarkable strides science has made since 1835, when the lectures were delivered, is still in many respects, a standard work on the topics treated,—this scholarly prince of the Church, summarizes in one sentence, what may be said on the subject of the antiquity of the Hindus, when he says: "Instead of the six thousand years before Alexander, attributed by some writers, on the credit of Arrian, or the millions deduced from the fables of the Brahmans, we have, as Jones and others had conjectured, the age of Abraham, as the earliest historical epoch of an organized community in India."

The boasted antiquity of the Chinese fares no better in the hands of modern historical criticism. As in the case of the Hindus, national pride and ambition impelled the Chinese to claim an extravagant remoteness of time for their origin and for the beginnings of their history. It is the boast of the Chinese that theirs is the oldest nation of the globe; and, if we are to credit their annalists, the history of the Celestial Empire stretches back to the venerable antiquity of three million two hundred and seventy-six thousand years before the Christian era. Like the Hindus, the Chinese tell us that, in the earliest times, their country was governed by celestial rulers, or demigods, and their historians gravely give us long lists of kings and dynasties whose reigns extend over tens of thousands and hundreds of thousands of years.

When, however, we come to sift truth from fable, and determine how much of historical fact there is in their fanciful mythological creations, we find that the epoch to be assigned to the commencement of sober history is very recent indeed.

We are indebted to the Jesuit missionaries for the first reliable data bearing on the history of China. The learned chronologist, Father Gaubil, as the result of calculations based on certain eclipses mentioned in Chinese annals, is disposed to regard the date when the emperor Yao ascended the throne, as the first event that can be fixed with any degree of accuracy. According to the computations of this able Sinologue, the date in question is to be assigned to the year 2357 B.C.

Father Gaubil's chronological views were endorsed by many

¹ Op. cit., vol. ii, p. 37.

competent critics; but a number of eminent scholars who have made a careful study of the many difficulties involved in determining any of the remote dates of Chinese records, think that the earliest date of authentic history belongs to a period far more recent.

The oldest of the classical books of China is the Chou-King, by the celebrated philosopher, Confucius, which is alleged to give the history of the country between 2357 and 627 B.C.; but even those who are favorable to the great antiquity of the Celestial Empire are forced to admit that the Chou-King does not afford us a means of establishing a system of chronology for the long period of time which it embraces.

If there is no satisfactory evidence for the great antiquity of China, so often claimed for it, in the native records, there is still less in the annals of any of the ancient nations of the world with which China may reasonably be supposed, if so ancient as she pretends to be, to have been in communication. Thus Chabas has shown that the monuments of Ancient Egypt include no mention of the Celestial Empire, although there are references made to all other then known peoples.

Klaproth, who devoted special study to the subject of Chinese history, denies the existence of historical certainty in the annals of China prior to the year 782 before Christ,—" pretty nearly the era of the foundation of Rome, when Hebrew literature was already on the decline." In this view he is followed by Lassen, who does not hesitate to declare that the Chinese have no authentic history before the beginning of the eighth century before the Christian era. As a matter of conjecture, he fixes the first dynasty of the Celestial Empire, that of Hia, at a period not antedating the year 2205 B.C.

At all events, whatever may be the antiquity of the Chinese as a race,—and it does not appear that we shall ever have more light on the subject than we possess at present,—we can heartily subscribe to the opinion of the erudite Abbé Vigouroux, who confidently affirms that there is nothing in Chinese chronology which proves that China as a nation dates back to the time of Noah, and that we have in the chronology of the Septuagint all the time required for the development of its history.

A special interest has always centered in Egypt, for the reason that generations before India and China were known, the land of the Nile was regarded as the cradle of civilization. As far back as we can penetrate into her dim and distant history, we find her in full possession of that religion and of those arts and monuments which, from the earliest times, have ever remained the enigma of travellers and scholars. We know nothing of the infancy of her

strange people. From the most remote ages they appear to us in full maturity, and in all the splendor of their marvellous powers.

Long anterior to the Hebrew Exodus, before Abraham visited the land of the Pharoahs, Egypt was old, and the seat of a government that had endured through many and powerful dynasties. Centuries before "the Father of the Faithful" had left Ur of the Chaldees, the pyramids of Gizeh, looking down upon the broad valley of the Nile to the east and the great Libyan desert to the west, stood as monuments that were then the evidence and the pride of a great nation, as they were the wonder and the inspiration of Napoleon and his warriors; and this at a period so long subsequent that nothing remained to attest the pristine glory of two of the nation's greatest capitals, both within sight of Cheops and his companions, but a mutilated sphynx where Memphis once stood, and a solitary obelisk on the site of Heliopolis.

Our knowledge of Egyptian chronology is derived from three different sources: from Greek travellers who visited the land of the Nile; from the historian Manetho, an Egyptian priest, born about 300 B.C., who wrote in Greek a history of his country under the reign of Ptolemy Philadelphus; and from various original monuments, papyri, and inscriptions, the most important of which have been brought to light during the present century.

Relying on information obtained from the priests of Heliopolis, Solon and Herodotus attributed to Egypt a very high antiquity. According to the former, the Egyptian monarchy stretched back full nine thousand years, while according to the latter the earliest annals of the Egyptian kings dated from an epoch more than two thousand years earlier. Historians, however, have given little credence to the opinions of the Greeks regarding the age of Egypt as a nation, and, hence, we may dismiss what they have to say on the subject without further comment.

Manetho's history, unfortunately, has been lost, and all of it that has come down to us are the lists of kings and dynasties as preserved in the works of Julius Africanus, Eusebius and Syncellus. Like the Indian and Chinese authors, Manetho gives, as the first rulers of his country, long dynasties of gods and heroes. The reign of the gods, according to him, lasted no less than thirteen thousand nine hundred years,—far from the hundreds of thousands and millions of years claimed for the reigns of their gods by the Chinese and Hindu writers, but a long period in comparison with the time allowed to the reign of the kings of whom we have authentic records.

Rejecting as mythical the reigns of gods and demi-gods, the majority of critics are disposed to regard as historic the thirty dynasties of Manetho, which begin with Menes, the first ruler of Egypt, and end with Nectanebo II. In his scheme of chronology, the Egyptian historian purposes giving not only the number of dynasties, but also the greater part of the names of the kings belonging to them, together with the duration of their reigns and the order of their succession.

But an objection to Manetho's lists is that he enumerates all the dynasties as if they were successive, whereas it is well known by all students of Egyptian history that several of the dynasties were contemporaneous. Again, he never speaks of two rulers being associated on the throne, when we know, from incontestable evidence, that in several instances two kings occupied the throne at the same time. A notable case in point is that afforded by the joint reign of Seti I. and his famous son,—often called the Napoleon of ancient Egypt,—Rameses II. A third objection is that he frequently exaggerates the length of time during which his monarchs bore sway. For this reason critics generally are of the opinion that the lists of Manetho require the control and support of other and more authentic sources of information. These are supplied by various papyri, inscriptions and monuments.

Undoubtedly the most important, as well as the most authentic chronological record yet discovered, is the celebrated Turin papyrus. It gives a list of those who ruled from the time of the gods and heroes to the epoch of the Hyksos, or Shepherd kings. Of the greatest value, so far as it goes, it unfortunately exists only in tattered fragments and lacks completeness. For this reason Brugsch, in his "History of Egypt under the Pharaohs," says of it: "As the case stands at present, no mortal man possesses the means of removing the difficulties which are inseparable from the attempt to restore the original list of kings from the fragments of the Turin papyrus. Far too many of the most necessary elements are wanting to fill up the *lacuna*."

Besides the Turin papyrus, we have the tables of Abydos, Sak-karah, and Karnak, and others of less importance, all of which have been discovered in various parts of the Nile valley within the past few decades. They exhibit the cartouches of a large number of the rulers of Egypt, as well as their order of succession, and, in spite of certain omissions and discrepancies, are invaluable to the student of Egyptian history and chronology.¹

But important as are the records just mentioned, they do not by any means enable us to construct a system of chronology that can be considered even approximately correct. They tell us, indeed, how long each king reigned and how long each Apis lived, but they do not inform us as to the connection of the reign of any one



¹ Cf. Lenormant's Histoire Ancienne de l'Orient, tome ii., pp. 37 et seq.

sovereign with that of the ruler who preceded or followed him; of the time that elapsed between one Apis and the next in succession. Neither do they give us any direct information regarding the time during which a sovereign was alone on the throne, and when he had a coadjutor. It is certain that there was a number of simultaneous dynasties, but just how many there were is still a matter of great diversity of opinion. According to Lenormant there were but two; according to Brugsch, five; Lieblein and Bunsen admit seven, while Poole and Wilkinson extend the number to twelve.

"The greatest obstacle in the way of establishing a regular Egyptian chronology," says the accomplished Egyptologist, Mariette, "is the fact that the Egyptians themselves had no chronology." And they had no chronology because they had no era. Hence, as Mariette well observes: "Whatever be the apparent precision of our computations, modern science will always fail in any attempt to restore that which the Egyptians never possessed."

According to M. de Rougé, the first event to which a certain date can be assigned is the expulsion, in the year 665 B.C., of the Ethiopians by Psamatik I., of the twenty-sixth dynasty.² In this opinion Mariette, Brugsch, and others fully concur. There are numerous documents belonging to this period which put the matter beyond doubt. Besides, Egypt was then in constant communication with Greece, so that we have information from the writers of the latter, as well as from the monuments of the former nation, of events that occurred during this period in the land of the Pharaohs.

Astronomical calculations, based on the heliacal rising of Sothis—Sirius—enable us, with some degree of exactness, to carry back the chronology of Egypt to the year 1322 before the Christian era.³ There are some historians who incline to the belief that we can go back still further—to the eighteenth or nineteenth century B.C., about the time of the expulsion of the Hyksos.

Beyond this all is conjecture, and we enter into the region of what De Rougé has designated "uncertain chronology." Authorities and monuments are vague and conflicting. In numerous cases it is impossible to decide whether certain dynasties were successive or contemporary; whether they bore rule over the whole of the Nile valley, or whether, as in certain undoubted instances, their authority was limited to only a small portion of the Delta.

¹ Apercu de l'Histoire d'Egypte, p. 66,

² Cf. Felix Robiou, a disciple of De Rouge, in his scholarly article, "Chronologie de l'Egypte," in the admirable *Dictionaire Apologétique de la Foi Catholique*, par l'Abbé J. B. Jaugey.

⁸ See Le Monde et l'Homme Primitif selon la Bible, par Mgr. Meignan, pp. 333 et seg.

It is these *lacunæ*, imperfections and contradictions in all existing records that render so difficult the construction of a system of chronology, and that have given rise to so many and such diverse estimates regarding the age of Egypt as a nation.

Wilkinson assigns the date at which Menes, the first monarch of the first dynasty, ascended the throne, to the year 2691 B.C., while Stewart Poole fixes on the year 2717 B.C. as the date of this event. Bunsen makes the figure 3051 or 3623; Lepsius, 3852; Lieblein, 3893; Pessl, 3917; Chabas, 4000; Lauth, 4157; Brugsch, 4455; Lenormant and Mariette, 5004; Unger, 5613, and Bockh, 5702. This, as Rawlinson well observes, "is as if the best authorities upon Roman history were to tell us, some of them, that the republic was founded in B.C. 508, and others in B.C. 3508."

How long the Egyptians were in the valley of the Nile before Menes ascended the throne is, if anything, a still more vexed question. Prof. Owens claims 7000 years as the time that has elapsed since the origin of primitive Egyptian civilization. Others demand 10,000 and 15,000 years, while Baron Bunsen puts the figures at 20,000 years.

With such conflicting data before us, furnished by those who are most competent to pronounce judgment in the premises, it were unwise for us to attempt to untie the Gordian knot. One of the latest authorities on the subject, the learned Egyptologist, M. Felix Robiou, says in reference to the question: "We do not know even approximately the duration of the history of the Pharaohs; but the least improbable conjecture, one which cannot be far from the truth, is that it commenced in the fourth millennium before the Christian era, possibly in the first part of this millennium." The Abbé Vigouroux, is disposed to accept a still higher figure, and to admit that the reign of Menes dates from a period 5000 years B.C. But even granting this figure to be correct, he insists that "Genesis properly understood allows Egyptologists full liberty to attribute to Egypt any antiquity that a just study of its monuments may demand." 3

How long the descendants of Noah had been established in the valley of the Nile before the time of Menes is a question on which the monuments of Egypt throw no light whatever. It may have been but a few, and again it may have been several centuries. But, whatever time may have elapsed between the advent of the Noachidae and the accession of Menes to the throne, we can rest quite assured that when we shall have full information on the sub-

¹ See History of Ancient Egypt, chap. xii.

² Dictionaire Apologétique de la Foi Catholique, loc, cit,

³ Revue des Questions Scientifiques, October, 1886, p. 400.

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ject, Egyptian chronology on the one hand and Biblical chronology on the other, will be found to be in perfect harmony.

During the past fifty years much valuable information regarding the antiquity and early history of our race has been gleaned from investigations which have been conducted and discoveries which have been made in various parts of Western Asia, and notably in the valleys of the Tigris and the Euphrates. Prior to this period our knowledge of the language and literature, as well as of the history of Chaldea, Assyria and Babylonia was as limited as was that which was had of Egypt before the famous discoveries of Champollion, Young and Rosellini.

It is true that Berosus, a priest of Belus, at Babylon, had, about 250 B.C., written in Greek a history of Babylonia, but of it nothing is now extant except a few fragments preserved in the writings of Apollodorus, Polyhistor, Eusebius, Syncellus and a few of the early Greek Fathers. Enough, however, is known of his chronology, to convince us that it is no more deserving of credence than that of Manetho. Both cater to the vanity of their countrymen by assigning a fabulous antiquity to their respective nations, and by making their earliest rulers gods and heroes. But whereas Manetho is satisfied with an antiquity of 30,000 years for his country up to the time of Alexander the Great, Berosus carries the history of Babylonia back to a period antedating the Christian era by over 468,000 years. According to this annalist there were ten kings before the Flood, whose aggregate reigns had a duration of 432,000 years. It is no wonder, then, that even the old Greeks and Romans, addicted as they were to myths and fables, felt themselves called upon to reject such pretensions as absurd.1

But although the first part of the lists of Berosus, like the first part of Manetho's lists, is mythical, the latter portions of his chronological scheme, like that of the Egyptian historian, is substantially correct, at least so far as concerns the time demanded for the various dynasties and rulers mentioned. According to Rawlinson, the earliest historical date of Berosus is about 2458 B.C., considerably more remote than the earliest authentic date of Egyptian history.

It is, however, from the inscriptions on tablets, cylinders, and other monuments that have been discovered where once stood the flourishing cities of Assur, Sippara, Erech, Accad, and those famous capitals of the ancient world, Nineveh and Babylon, not to speak of numerous other localities in western Asia, that we derive

¹ Cicero in his work *De Divinatione*, in referring to the Chaldeans, says of them; "Condemnemus hos aut stultitiae aut vanitatis aut impudentiae, qui CCCCLXX millia annorum ut ipsi dicunt monumentis comprehensa continent et mentiri judicemus,"

our most accurate knowledge regarding the antiquity as well as the history of the peoples who, in ages long past, constituted the great kingdoms of Chaldea, Babylonia, and Assyria.

And here we meet with new triumphs of erudition and genius that remind us of the wonderful achievements that have rendered the name of Champollion immortal. For centuries past specimens of wedge-writing, or nail-like inscriptions, found among the ruins of various cities of the Orient, had attracted the attention of scholars and travellers, but, until a few decades ago, the meaning of these strange figures was involved in even greater mystery than that which enveloped the hieroglyphics of the temples and obelisks of the land of the Pharaohs. To the wondering Arab they were the work of the genii, while to the European they were often but the expression of the fantasy of some architect who wished to show in how many different ways he could combine these nail-like forms.¹

In 1765, during his journeyings in the east, Karsten Niebuhr, the father of the illustrious historian, copied some of the inscriptions at Persepolis, and offered several theories regarding them which subsequent investigators have confirmed. Scholars in various parts of Europe now became interested in cuneiform writing, but all attempts to decipher them were fruitless. A Champollion was required for the task, but he appeared not. A genius like his is youchsafed to the world only at rare intervals.

In 1802 Grotefend succeeded in making out the names of Darius and Xerxes, and thus supplied a key for the reading of the cuneiform characters, as Champollion at a later date discovered the key to the Egyptian hieroglyphics by deciphering the names of Ptolemy and Cleopatra on the now famous Rosetta Stone. But Grotefend's work was far from being as thorough as Champollion's. While the former was able to read but a few names—he never accomplished more—the latter was fortunate enough, unaided and alone, to decipher not only the writing of ancient Egypt, but also to resuscitate its grammar and language as well.

A third of a century elapsed before anything further was done. At the end of this period, Burnouf in France, and Lassen in Germany, independently and almost simultaneously, announced the discovery of the alphabet of the trilingual inscriptions of Persepolis. This was a giant step forward, and contributed materially towards the solution of a problem on which, for a long time, some of the keenest intellects of Europe had been engaged.

The next great advance made was the publication, in 1857, in the "Journal of the Royal Asiatic Society," by Sir Henry Rawlinson,



¹ Cf. Vigouroux's La Bible et les Deconvertes Modernes, tome i., pp. 34 et seq.

of the Babylonian text of the trilingual inscription of Darius on the rock of Behistun. This rock often, and justly so, called the Rosetta Stone of Assyriology, had on it inscriptions in three different languages, ancient Persian and Medic, and Babylonian or Assyrian. As soon as the Babylonian text was deciphered by the brilliant English colonel, a key was supplied for the interpretation of the thousands of unilingual inscriptions found everywhere along the valleys of the Tigris and the Euphrates.

These conquests of genius, added to Botta's discovery, a few years before, of the ruins of Nineveh, which for nearly twenty-five centuries was so effectually buried under the earth that even its site was unknown, spurred on antiquaries and explorers to new achievements, and a long succession of triumphs was the result. Botta had unearthed the palace of Sargon and discovered a large number of tablets and inscriptions of the utmost value. Layard, Loftus, Place, Oppert, George Smith, Hormuzd Rassam and others followed him and exhumed monuments and palaces which were bewildering in their number, extent and magnificence.¹

But by far the most important discovery, the one in which we are at present most interested, and the one which, more than all the others combined, contributed to put Assyriology on a firm and permanent basis, one which has proved of untold value to biblical students, was the discovery by Layard, in 1850, of the celebrated library of Assurbanipal.

This library was one of many that formerly existed in all the large cities of Chaldea and Assyria, but the only one that so so far has been discovered, and probably the only one that has been preserved. The Assyrians had neither papyrus, like the Egyptians, nor parchment, like the Greeks and Romans, nor paper, such as we possess. Their books were composed of tablets of baked clay, coctiles laterculi, Pliny calls them—a fortunate circumstance, no doubt, as they would doubtless have otherwise been destroyed long centuries ago. As it is, we have a great portion of them, and many of them in a good state of preservation.

Assurbanipal—the Sardanapalus of the Greeks, the grand monarque of Assyria, the patron of art, science, and literature—had in his library, besides works on history, astronomy, astrology, theology, politics, geography, and other branches of knowledge, a valuable collection of syllabaries, grammars, and dictionaries, which the Assyrians themselves had used in learning the significance of the symbols, and in mastering the difficulties of their written lan-



¹ Cf. Rawlinson's Seven Great Monarchies, Assyria, chap. vi., and Lenormant's Histoire Ancienne de & Orient, tome iv., chap. iv.

³ The noted German writer, Scholz, speaks of it as "Eine Bibliothek aus dem 9. Jahrhunderte v. Chr., und zwar Alles im Original.

guage. By means of the contents of this library—undoubtedly the oldest in the world—which Providence at an opportune moment placed in the hands of the scholars of Europe, Assyriologists were able to lift all that was left of the veil that still obscured the secrets of the mysterious wedge-writing of western Asia. In the words of Maspero²: "In less than thirty years, a new world of languages and of peoples, before unknown, was discovered; thirty centuries of history were brought from the tomb to the full light of day."

To realize fully the extent of this wonderful find, it is sufficient to state that the number of tablets estimated to have existed originally in the royal library of Nineveh was not less than ten thousand. According to Mr. Birch, there were, in 1872, about twenty thousand fragments of these tablets in the British Museum, not to speak of the countless fragments in other museums, and in the possession of private individuals in various parts of the world. It has been computed that these books of baked clay, before the destruction of the library, would have made full five hundred printed quarto volumes of five hundred pages each.

The books of this wonderful library, relating to the manners and customs, the religion, science, and governments of the ancient peoples who inhabited the lands watered by the Tigris and the Euphrates, are interesting and valuable, but the tablets bearing astronomical records are, for our present purpose, far more important. Thanks to the computations and tabular statements of the old Chaldean astronomers, we are now able to fix the dates of many historical facts of Babylonian history as far back as the sixth century B.C., with almost mathematical precision.

It had long been known that the origin of astronomy could be traced to Mesopotamia, and that the Chaldeans were the first astronomers. But beyond this general fact all was fancy and conjecture. Few or no details were known or available. About all that could be said on the subject was included in the following poetical paragraph of Lalande's "Astronomie," which was published more than a hundred years ago:

"The inhabitants of the vast plains of Sennaar, where was built the city of Babylon, were, according to many savants, the oldest astronomers, and the first of all observers; at least their observations are the oldest which have come down to us. Everything concurred to direct their attention towards the heavens. The care of their flocks was their principal occupation. But the heat of the day made them select the night for their labors and their journey-

¹ Histoire Ancienne des Peuples de l'Orient. Quatrieme edition, 1886. Appendice, p. 712.



ings, so that the spectacle of the heavenly bodies forced itself, as it were, on their attention, in spite of themselves."

Within the last few years, however, a great advance has been made in our knowledge respecting the beginnings of the science of astronomy, and our information regarding the early work and methods of the first of the world's star-gazers is comparatively complete. The learned palæographists and mathematicians, Fathers Strassmaier and Epping of the Society of Jesus, as the result of a careful decipherment of some of the cuneiform inscriptions found in the library of Assurbanipal, and of a series of long and complicated calculations that only astronomers can fully appreciate, have demonstrated conclusively, that, as far back as the sixth century before our era, the astronomers of Babylonia had a very accurate knowledge of the science of the stars, and that they made observations of the eclipses of the sun and moon, of the oppositions and conjunctions of the planets, and of some of the stars, with a degree of accuracy that is simply marvellous. More than this, they had a calendar remarkable for its exactness, and a collection of tables based on observations and calculations, that approximated, in many respects, to our modern ephemeris.1

But remote as is the past to which the tablets of the Chaldean astronomer convey back the chronologist, there is reason to believe that new discoveries will supply still other dates of a much greater antiquity. The study of Chaldean astronomy from cuneiform inscriptions is but in its infancy, and yet it has already disclosed a number of facts of which not even the most sanguine Assyriologist ever dreamed. One of these facts, and it is of paramount importance, is that the Assyrians, and the same may be said of the Chaldeans and Babylonians, had a chronological sense, something, which, as we have seen, was entirely wanting to the ancient Hindus, Chinese and Egyptians. This fact, if no other, should inspire more confidence in the chronological records of Assyria, Chaldea and Babylonia than we are warranted in feeling in those of any of the other ancient peoples of the Orient.

The Assyrians, unlike the Egyptians and Chinese, did not reckon time by the years during which their kings held the sceptre, but rather by the names of eponym officials, called *limmu*, who, like the archons at Athens, and the consuls at Rome, gave their names to the years during which they held office. By means of eponym canons, or lists, some of which have been preserved, we are able to

¹ See Astronomie a Babylone, by the Rev. J. D. Lucas, S.J., Revue des Questions Scientifiques, October, 1890, and April, 1891. Also, by the same writer, Ephemerides Planetaires des Chaldéens in the same Revue for January, 1892. Consult likewise Astronomisches aus Babylon order das Wissen der Chalder uber den gestirnten Himmel, by Fathers Strassmaier and Epping, S.J., published in 1889 as a supplement to the Stimmen aus Maria Laach.



assign, with comparative certainty, the dates of events that occurred at very remote periods of Assyrian history.

Thus, from inscriptions at hand, we know that the institution of the *limmu* dates as far back as the fourteenth century B.C., and there are valid reasons for believing that it existed long prior to this epoch. Other inscriptions that Assyriologists seem disposed to credit, carry us back to the year 2274 before our era, while the celebrated tablet of Nabonidos, about which so much has been written, gives us a date nearly fifteen centuries more remote. This remarkable monument, now preserved in the British museum, seems to fix the date of the reign of Sargon I., the father of Narsam-Sin, at about thirty-eight centuries before the Christian era, a date much earlier than was formerly attributed to this sovereign.¹

According to the testimony of other monuments, quite a number of kings occupied the throne during the time that intervened between the reign of Sargon I., and the deluge of Noah. This, contrary to the generally received opinion, would place the flood at a period 4000 years B.C., at least, and possibly, at a date much earlier. Certain inscriptions from the library of Assurbampal, relating to the Deluge, and deciphered by Mr. George Smith² led Sir Henry Rawlinson, than whom no one is more competent to express an opinion on the subject, to ascribe to the great cataclysm, so graphically described in Genesis, a date preceding our era by six or seven thousand years.

Whatever of truth there may be in Rawlinson's estimate, it seems certain that Assyriologists are able to carry back the history of our race to a more remote period than can possibly, with any show of reason, be claimed for it by the chronologies of India, China or Egypt. And it appears quite reasonable that this should be so. Central Asia, if not Mesopotamia, according to tradition and science, was most likely the birth-place of the human species, and hence, it seems reasonable that the people who inhabited the valleys of the Tigris and the Euphrates should have a greater antiquity than those who lived in the land of the Nile, or in regions more distant from the first home of the race. If, therefore, it should be proven that Egypt had a civilization antedating the Christian era by 5000 years and more, as many suppose, we should be quite warranted in claiming for the ancient peoples of Mesopotamia a civilization several centuries older and thus fixing the be-

² Cf. Les Premieres Civilizations par François Lenormant, tome ii., Le Deluge et P Epopée Babylonienne,



¹ Lenormant, Histoire Ancienne de l'Orient, tome v., p. 79, in referring to this tablet observes: "Si cette indication est exacte, comme rien ne s'y oppose, Naram-Sin regnait vers 3750 et Sargon, son pere, vers 3800 avant J.C.; c'est la plus ancienne date certaine de l'histoire." Mr. Sayce, the distinguished English Assyriologist, hesitates about accepting this date as reliable.

ginnings of its history somewhere near unto six millennia before the time of Christ.

Linguistics and ethnology tell the same story as history and astronomy. They demand a greater antiquity for mankind than Biblical scholars have hitherto been disposed to concede. Like history and astronomy they seem to fix the dispersion of the sons of Noah about five or six thousand years B.C., a much longer period than is indicated by any of the versions of the Bible as usually interpreted. Adding this time to the two thousand years that are ordinarily supposed to have elapsed between the creation of Adam and the Deluge, and the nineteen centuries that date from the coming of Christ, we have for the age of the human race, a period that covers nearly ten thousand years.

It cannot be urged that our figures are too liberal. On the contrary the estimate is rather conservative. There are many, as we have seen, and we have mentioned but a few of those, who have studied the question, who insist on it that history and astronomy, as well as linguistics and ethnology, teach us that man has been on the earth fifteen or twenty thousand years, if not more. But even these figures, high as they are, are small in comparison with those furnished us by geology and prehistoric archæology.

How reconcile these dates and figures with Scriptural chronology? Are not the Bible and science hopelessly at variance in regard to the antiquity of man, and have we not here at least an instance of that irreconcilable conflict, we hear so much of, between the certain results of modern scientific research, and the inspired record? We do not think so. On the contrary, we are firmly convinced that a careful and unprejudiced study of the question of man's antiquity will issue in proving, as has been so often done heretofore, in other matters, that the Bible and science are at one regarding the question now under discussion, and will eventually render the same testimony.

Before, however, attempting to demonstrate the truth of this proposition, we shall take up certain objections that are deemed more formidable than any that have yet been urged, and which, during the past third of a century, especially, have attracted an attention, and assumed an importance, that render all other difficulties comparatively insignificant. The objections referred to are presented in the names of geology and that newer science, prehistoric archæology. But space prevents their examination at present, and we must, therefore, reserve a discussion of this, the most interesting portion of our thesis, for a subsequent article.

JOHN A. ZAHM.

¹ Cf. Mgr. Harlez in La Controverse, 1881, pp. 577, 578; also the admirable criticism, by the learned Father Vanden Gheyn, S.J., of the Origines Ariacæ of Karl Penka, in the Revue des Questions Scientifiques, p. 605, April, 1884.

THE HIGH CHURCH POSITION UNTENABLE.1

THAT aggregate of separate ecclesiastical societies called the Anglican Communion is divided into three great parties—the High Church, the Low Church and the Broad Church. The differentia of the High Church party is the doctrine that a visible body, founded on an episcopate deriving its authority through successive ordinations from the Apostles, is the medium through which God imparts grace and salvation to men. The Low Church party rejects this doctrine, and is in general assimilated to that class of Protestants who call themselves "evangelical." The Broad Church is low but rationalistic.

There are many varieties of high churchmanship, produced by lesser or greater approximation to Catholicism; of late years many have preferred to be called "Anglo-Catholics," and the most advanced are now usually called "Ritualists." When the independence of the United States had been acknowledged, and the Archbishop of Canterbury was authorized by Parliament to give episcopal consecration to three bishops-elect for American Episcopalians, these three prelates, together with one other who had already been consecrated in Scotland, proceeded in unison with their presbyters and the representatives of the laity to organize that Protestant Episcopal Church which has since become one of the principal Protestant denominations in the United States. From the beginning there has been a considerable and growing High Church party in this communion, which has kept up a strong and aggressive controversy with other Protestant denominations whose organization is Presbyterian. Their champions laid themselves out chiefly in proving the doctrine of apostolical succession, the necessity of episcopal ordination for a lawful and valid ministry, and the primitive apostolic origin of liturgical forms and ceremonies in Christian worship. With their high view of the nature and office of the Church was also necessarily connected a conception of the sacerdotal character of the Christian ministry and of sacramental grace imparted through baptism and the Holy Eucha-The strict and logical churchmen denied all right to the non-episcopal societies to claim for themselves any church prerogatives. The Roman Church was mostly disregarded, and in face of the Protestant sects the Protestant Episcopal Church was

¹ Life of William Rollinson Whittingham, Fourth Bishop of Maryland. By William Francis Brand. 2d. ed. New York; E. & J. B. Young & Co. 1886.

proclaimed to be the only true and apostolic church in the country, the one fold of Christ to which all the scattered sheep, with their self-constituted shepherds, were bound to resort. In England, the Established Church is, in the eye of the law, the Church of England, and all those who do not belong to it are regarded as dissenters. The little daughter of the Church of England was exalted by her devoted adherents to a similar position of majesty, as the heiress of her queenly mother. The cause of episcopacy, as against presbytery, was sustained very successfully by a number of able men, who gained many converts, by whom the ranks of the clergy and laity were recruited. One of the colonial presidents of Yale College, Dr. Cutler, had previously gone to England, and receiving his orders there, had become one of the founders of the Episcopal Church in Connecticut, which had grown and thriven under the administration of Bishop Seabury. In Boston, the reminiscence of the vice-regal court gave to that Church, which had been the Church of the English, prestige and importance. had gained from an early period a strong foothold in New York, and this was strengthened by the large property acquired by Trinity Church. In Virginia and Maryland it had been by law established, and had the advantage of tradition on its side. Probably the dignity and decorum of its rites and ceremonies, together with the absence of repulsive Calvinistic dogmatism and of the violent style of revival preachers in the sermons of the clergy had more influence than any other cause to attract sober-minded people, persons of good taste and cultivation, and all who were weary of the spiritual despotism, the dreary modes of worship, the gloomy doctrines of Puritanism and Presbyterianism.

So long as the Catholic Church was out of sight and out of mind, and it could be taken for granted that the Church of England had preserved a true succession from her ancient Catholic episcopate, her American daughter seemed to have a fair field before her.

But the case was altered when the Oxford movement and the growing importance of the Catholic Church in English-speaking countries brought the High Church claims face to face with those of an older and wider episcopacy, and with the claims of Rothe as the Mother and Mistress of churches.

It was at this period that the subject of Mr. Brand's biography began his ecclesiastical career. William Rollinson Whittingham was the most remarkable personage, after John Henry Hobart, who has figured among the leaders and champions of the High Church party in the Protestant Episcopal Church. He was a typical High Churchman, in the foremost rank as a leader of his party, and therefore his biography is a document of great importance and

interest to his co-religionists, and to many others as well. Besides, his personal character and history were, in themselves, interesting. Mr. Brand has done his work faithfully and well. He has exhibited the personality and the public career of his subject as they really were; although, in some respects, his own sentiments and sympathies are certainly not in harmony with those of his former ecclesiastical chief and life-long friend. Moreover, he has observed a courtesy in speaking of persons and things which gave occasion for invidious remarks of his own, quite in consonance with what those who have known him personally would have beforehand expected; so that no one, Catholic or Protestant, can take offense at what he has written, unless, perhaps, he is one of a certain clique of domestic foes of the bishop in his own ecclesiastical household.

The life of Bishop Whittingham was included between the years 1805 and 1870, and his episcopate began in 1840, thus extending over the long term of forty years. He was just a little younger than Cardinal Newman and a little older than Cardinal Manning; so that his life fell within the period so momentous in the ecclesiastical history of England and the United States, in which these two eminent men were the most conspicuous leaders in a movement of critical import both for the Catholic Church and for the Church of England. He was of English parentage, and by education and sympathy a thorough Englishman. His mother, a most remarkable woman, of a deeply religious character and a thorough education seldom seen in a woman, educated her son by herself, in a strict seclusion and with a Spartan severity, teaching him Latin, Greek, Hebrew, and some modern languages, together with the usual English branches, literally from his infancy. At the age of seventeen he entered a clerical seminary in New York, and after ordination was engaged in parochial work and the labors of a professorship in the seminary where he was graduated, until his appointment to the position of bishop of the Protestant Episcopal Diocese of Maryland. From childhood he was virtuous, pious after a very strict and even ascetic manner, and devoted to study with such a constant and excessive application that his health and constitution were seriously impaired; so that it is a wonder that he lived to the age of seventy-four. His life was secluded, and he was so shut up within the confines of Anglicanism that its stamp, as it were, pervaded and brought into a fixed, unchangeable form all the wax of his nature.

He was sensitive and affectionate in his temper, generous in his disposition, enthusiastic but also indefatigable and persevering in his undertakings, although it cannot be said that his career was a successful one. The history of his public life is a rather sad one,

full of records of illness, of wearisome struggles with the apathy and niggardliness of his flock, with the bitter and obstinate resistance of a portion of his clergy, with disappointments and untoward events of many kinds, and ending at last in a long, slow dissolution. All was not, however, cloudy and dark; for he was of a sunny and cheerful temper, not gloomy, morose or melancholy. vigor and force of mind and will were superior to bodily ailments; his intellectual resources furnished him with continual enjoyments and a refuge from the cares of office; he made many friends, who showed their sympathy by more than words when he was in trouble, and the tender ministrations of devoted affection alleviated and soothed the sufferings of illness until the end. He had his turns of depression and despondency, when he would wish that he was a poor negro slave, or a servant in a religious house, rather than to be burdened with the responsibilities of his office. But his elastic spirit always rebounded from this depression, and during his long and wearisome periods of illness he was a model of patience and fortitude in suffering. To a certain extent he was successful in bringing his diocese into a more prosperous and flourishing condition than it had been before he took charge of it. He died, having won the respect of all classes as a sincere, conscientious and disinterested laborer for the religious and moral welfare of his fellow-men, and a patriotic lover of his country; and having gained a high reputation for learning and ability.

Bishop Whittingham may be taken as a representative High Churchman; the man best fitted to hold and defend the fortress of the Protestant Episcopate, so far as that is a tenable position. His history presents the controversy in a concrete, tangible shape, having his side of it personified in himself as a leader and champion whose success or failure is equivalent to the victory or defeat of his cause. He asserted his claim to be the one and only rightful Bishop of Maryland as against the title of the Archbishop of Baltimore, and against every other claim to pastoral rights under whatever name independent from his jurisdiction. His clergy and laity were the true church to which all the baptized inhabitants of the State owed allegiance, while all other ecclesiastical societies were mere congregations of schismatics, if not even heretics. made a strenuous fight for his title, and had it engraved on his tombstone. His idea of the rights and powers belonging to his office as a bishop was, moreover, a very high one. The ancient axiom, Ubi Petrus ibi Ecclesia, changed into Ubi Episcopus ibi Ecclesia, might serve as a summary of his whole doctrine. His particular location in the diocese of Maryland brought him and his High . Church position face to face with Rome and her claim of supremacy. He was, as it were, domiciled under the shadow of the cathedral of Baltimore, whose deep toned bell boomed forth daily in the hearing of all the city the call to come there as to Mother Church. There was the throne of the highest Roman prelate in the United States, the See from whose domain the bishoprics and afterwards the provinces were formed over which this venerable church of Baltimore enjoys a perpetual precedence of dignity, though not a canonical primacy.

The school of High Church divines in England, which had counted some illustrious names among its leaders, preserved the semi-Catholic tradition from the sixteenth century, and leavened with it, more or less, the Church of England; until, towards the middle of the present century, it put forth a new vigor at Oxford, creating an excitement which was felt in this country and attracted the attention of the world. Its adherents were called by outsiders "Tractarians," from the famous "Tracts for the Times," which culminated in Newman's "Ninetieth Tract," and also "Pusevites," from the most distinguished leader of the movement. They met with violent opposition, and by many of their enemies were accused of being disguised Romanizers; while others more moderate and impartial charged them with holding and teaching principles and doctrines virtually Roman, with a tendency towards Rome; which, if they became prevalent and dominant, must have the effect of unprotestantizing the Church of England, and undoing the work of Henry, Edward and Elizabeth.

When the young Professor Whittingham was proposed for the diocese of Maryland, in which long and obstinate contests had been kept up between the High and Low Church parties over the election of a bishop, the Oxford controversy was beginning to make a stir in New York, and the Maryland Episcopalians were most anxious to discover whether Mr. Whittingham was a Tractarian. He was called by that name afterwards, and accused of being, whether wittingly or unwittingly, a Crypto-Roman churchman. The fact is, that his convictions and sympathies were with the Oxford movement in its beginning, and so far as it was purely Angli-He was of the school of Andrewes, Ken, the non-jurors, and Hobart. He admired the writings of Pusey, Newman, Keble, Williams, Palmer and others of the new school, and had a proclivity toward a catholicizing movement beyond the old-fashioned High Church position, which he might have followed but for certain rude shocks which threw him back on the Protestant prejudices of his education. Inclination toward Rome he had none; on the contrary, we have never known any Episcopalian clergyman, glorying in the name of Catholic, with such an intense and violent animosity against the Roman Church, except one; that is Bishop Coxe, who is not a reasonable man, but a phenomenon of

odium ecclesiasticum. We have heard him say that he would wish that Rome might be swallowed up by an earthquake. He regarded the whole Church under the supremacy of the Roman Pontiff as a vast and wicked schism, virtually heretical, and despoiled of the rights and privileges once possessed by the universal Church and all its portions. It was not merely that, as Anglicans have been used to assert, Roman prelates had invaded the territory in which bishops of the English Church and its colonies had prior and canonical possession, that he denounced them as schismatics. It was that they were not rightful and Catholic bishops anywhere, even where, as in Canada and Louisiana, they had prior posses-This was the full and fundamental plea for his claim to be the Bishop of Maryland, and for the claim of his sect to be, as he styled it in official documents, "The Holy Catholic Church, known as the Protestant Episcopal Church in the United States of America." It was on the basis of this assumption that he took an active part in organizing a little mission church in Mexico, to which a bishop was sent, an undertaking which, with all similar missionary expeditions into Catholic countries, his successor deprecated in the last General Convention of the Protestant Episcopal Church at Baltimore. It is only on this ground that the rulers of the Church of England can justify their establishment of bishops in Gibraltar, Quebec, Montreal and elsewhere, and planting their churches everywhere in Catholic countries and among Oriental Christians.

These anti-Roman views and sentiments only came out into their most explicit and emphatic expression gradually, and were not at first fully understood by those who either admired or distrusted Bishop Whittingham on account of his supposed sympathy with the Oxford soi-disant Catholic school of divines. In pursuance of this line of conduct toward the Church which he declared in the plenitude of his apostolic authority to be a schismatical and virtually heretical, even idolatrous, sect, he required of priests seeking admission into his communion a solemn abjuration, and re-confirmed lay persons who, in his phraseology, "returned to the Church from the Roman schism." "On one occasion, when a younger bishop vindicated himself for having called the Church of Rome 'infernal,' Bishop Whittingham said: 'There is one bishop in the house who is not afraid at any time or anywhere to profess his belief that the Lord has permitted Satan to have possession of that branch of his Church of which the Bishop of Rome is the head." He announced to the Convention of 1872 the deposition of one of his clergy, who had become a Catholic, "from the holy ministry at his own request, on his surrender of himself

¹ Life, vol. ii., p. 141.

as a slave to the Roman usurper of lordship over the heritage of God."

Nevertheless, Mr. Brand asserts that "he had no wish to deny that the Church of Rome and other churches submissive to her form parts of the Church Catholic. Yet his judgment of the Roman Church was very severe, and he always justified it because of long familiarity with her perversions of Catholic teaching and close study of the result of her system in countries under her control, undisturbed by the influence of other religious bodies."

Mr. Brand, to his credit tries to draw it as mild as he can being evidently much less anti-Roman than the subject of his biography. But he only shows the inconsistency of the bishop with himself and the great confusion of his ideas about the Catholic Church, caused by his hatred of Rome. Let us suppose the case of a French Huguenot or Jew, free from any supposed obligation of baptism and ordination in the Protestant Episcopal Church, seeking admission into that "part of the church catholic," which is in France. How would it sound to describe his reception into the church by the curé of one of the parishes of Paris in these terms: "A. B., having renounced the errors of the religion in which he had been educated, has been received into the Catholic Church of Christ by baptism in a schismatical and virtually heretical branch of the church under the dominion of the Roman Church, which is possessed by Satan, thus surrendering himself as a slave to the usurper of lordship over God's heritage." It is perfectly plain that the whole animus of Bishop Whittingham is the same with that of Cranmer, Jewell, Knox, Luther and Calvin. The Roman Church is, in all consistency, to be regarded as a fallen and apostate church; and, if there is any true church in western Christendom, it must be found among Protestants who have left the old and founded a new church, reformed according to the primitive model.

Bishop Whittingham, however, denied the character of a church to every Protestant body which had not preserved the apostolic succession of bishops. Not only this, but he denied the validity of baptism not administered by a duly ordained bishop, priest or deacon; thus cutting off from the flock of baptized Christians the whole multitude of non-episcopal Protestants, together with not a few of the clergy and laity of his own church. He was accustomed to re-baptize lay persons, and even presbyters. On one occasion he re-baptized a bishop-elect on the eve of his consecration.

From Bishop Whittingham's standpoint, western Christendom presents a sad spectacle indeed as a waste of schism and heresy,

¹ Ibid. ² Ibid.

having only the Church of England with her affiliations standing in a truly Catholic position; while even within this communion only a minority, which, in the language of the non-jurors, might be called a "Catholic remnant," professed distinctively the High Church principles and doctrines ascribed to the "undivided church before the separation of east and west."

As for the so-called "Orthodox Eastern Church," measured by the Protestant standard, it is just the same in all essential respects as the Roman Church, minus the papal supremacy; and a severe judgment on the Roman Church for perversions of Catholic teaching, if it could be justified, would, with this exception, strike equally both Latins and Greeks as virtually heretical through having added to the faith false doctrines, and schismatical through making unauthorized terms of communion, and excluding from church fellowship the really pure churches which have reformed themselves after the genuine, primitive type.

Thus, the High Churchman, both in theory and in fact, finds himself confined, as to church fellowship, to a communion which holds an isolated position in Christendom, separated from all which he consents to call catholicism, and from all Protestant societies except his own. Surely this is an untenable and unbearable position on a narrow and slippery ledge. No wonder that, after finding efforts to obtain consolation from St. Petersburg and Constantinople vain, and being disappointed in the "Old Catholic" fiasco, bishops should seek for some brotherly sympathy in a Presbyterian synod, and long to see their Protestant brethren throng to the portal of the "historic episcopate."

Bishop Whittingham was a Protestant who did not merely and passively submit to a technical designation fastened on him by official acts and custom, but officiously, and without any compulsion, entitled his Baltimore magazine "The True Catholic, Reformed Protestant and Free."

But he also emphatically claimed and asserted for himself and his church the glorious title of Catholic. In what, then, did this catholicity consist? He believed in a visible institution, founded by Jesus Christ, for all times and places, with a definite creed, a hierarchy, sacraments and ordinances of divine appointment and perpetual obligation, and whose proper name is the One, Holy, Catholic, Apostolic Church. Every doctrine denying or altering any article of the Catholic creed is heresy, separation from the Catholic Church is schism, and both are deadly sins. The hierarchy of the church was constituted chiefly in the Apostles, whose ordinary powers were transmitted by ordination to bishops, their successors in office, and, secondarily, in two inferior orders of presbyters and deacons, who received their ministerial character only

by episcopal ordination. He believed also in the sacerdotal character of the ministry, viz., as being "a human intervention for the remission of sins"; in sacramental grace; in the sacrificial nature of the Holy Eucharist, according to a certain sense; and in some kind of real presence of the body and blood of Christ in the consecrated bread and wine. He acknowledged the dogmatic decrees of the first six councils, the doctrine and discipline of the early centuries, and the teaching of the Fathers, as containing a trustworthy witness to the faith and law received from the Apostles, and an authoritative interpretation of the inspired rule of faith and morals contained in the Scriptures.

This is the catholicism of a High Churchman in the abstract. So far as it is positive, it is in agreement with the concept which a Greek or a Latin theologian forms of objective catholicism. The difference is one of shortcoming and is negative. It does not give, in the concrete, a tenable position to Dr. Whittingham as Catholic Bishop of Maryland, and to his communion as the Catholic Church in the United States of America.

The High Church position is the position of a party standing on private opinions and not on official, authoritative confessions or formulas of faith. Bishop White, Dr. Turner, who was the principal professor in the New York Seminary for many years, and many other leading men, rejected that semi-catholic system which was taught by the Oxford divines. Some denounced it as a deadly heresy, another gospel. Official, ecclesiastical orthodoxy, in the Church of England and her American daughter, admits the low and broad churchmanship of a great number of the clergy and laity within its ample skirts. Bishop Whittingham was not required by canonical law to assume the attitude of a priest offering sacrifice on an altar, to style himself Bishop of Maryland, to give certificates that he conferred confirmation and orders according to the rite of the Catholic Church, to pronounce lay-baptism invalid, or to proclaim all Christian societies not in his communion schismatical sects. He was obliged to recognize bishops and presbyters of the Low Church party as having an ecclesiastical equality with those of his own party. When he had preached one of his famous sermons on the priesthood during morning service in Christ Church, Baltimore, on the occasion of his instituting the Rev. Mr. Johns as rector, he had to submit to the mortification of being flatly and vehemently contradicted by that gentleman in a sermon preached at the evening service.

Now, on the hypothesis that there was a pure Catholic Church, the legitimate heir and representative of the Church of the Fathers and the first six councils, existing in America, surrounded by sects and confronted by a great pseudo-catholic rival, that true Catholic Church ought to proclaim its character and title openly, ought to

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teach distinctly the Catholic faith of the Fathers and condemn all contrary heresies, ought to show plainly its divine lineaments as the Church of God, so that it might be known of all men as the Holy Catholic Church. The fact that Bishop Whittingham's ecclesiastical connection was unknown as the Catholic Church, and "known as the Protestant Episcopal Church in the United States of America," is enough to prove that he substituted an ideal creation of his own imagination, a cathedral in the air, for the more modest reality which old-fashioned Episcopalians have been wont to style "This Church" and "Our Church."

But even this ideal church lacks some essential elements of unity and catholicity. Its complete, organic constitution is found in each particular diocese, no matter how small, where there is a bishop, with his clergy and laity. The collection of these single, independent churches, although spread over the whole world, cannot make one, catholic church, any more than America can be called one republic, or all the peoples of Aryan descent a universal Aryan nation. Besides, although all these churches, if they preserved intact one faith, one law, the same sacraments, the same discipline and unbroken fellowship with each other, would have a moral unity; yet, this merely episcopal constitution would not possess the requisites for the preservation of this common agreement, or have any adequate means of hindering the breaking up of Christianity into a multitude of hostile sects.

The confederation of dioceses in a particular country is evidently a merely human and voluntary association, according to this idea of the Catholic Church. Nevertheless, such an association is dignified with the titles which belong only to the Catholic The Church of England, or the Protestant Episcopal Church of America, is regarded as the body into which one is incorporated by baptism; as the mother to whom allegiance is due; as having an authority in doctrine and discipline which must be This is an absurdity. A visible church which is one and catholic must have unity and universality of organization, and to have authority it must have infallibility. Its unity must bind it together in all ages, its sanctity must preserve it from teaching error and commanding or permitting sin, its catholicity must give it extension in time and space as one whole, not as a multiplication of separate, similar units, its apostolicity must be a continuity of apostolic authority including the essential element of supreme and universal teaching, judging and governing power. It is impossible that a Catholic Church should possess these attributes without a head and a centre of unity. There must be One See, One Church, which is indefectibly and infallibly secured on the basis of unity, sanctity, catholicity and apostolicity; an immovable

centre in which resides supreme authority and the source of episcopal jurisdiction in all confederated churches; in order that they may be all one, parts of a whole, branches from one trunk and one root, a perfect society, an organic, living body, animated by one soul, having a perpetual, indestructible life. An apostolic succession in an episcopate is not complete, without the succession of the apostolate as it was originally constituted under one head and prince of the apostolic college. The Catholic Church as one church, one flock, one society of all the faithful, bishops, clergy and laity; must have one head, one shepherd, one supreme bishop, the universal doctor, judge, and ruler of all Christians, as the delegate and vicar of Jesus Christ, who is the High Priest and Apostle over the household of God. The only complete and perfect definition of the church is: the Catholic, Apostolic, Roman Church.

The Oxford movement, bécause it was catholic, necessarily led toward Rome, by the roads of history, logic and theology. mies and impartial observers saw this from the beginning, though the leaders and disciples of the movement did not see it. In those days, it was a far cry to Rome. A crowd of ardent, enthusiastic young men were fascinated by the idea of the Catholic Church, while they were repelled by the prejudices of education and Protestant tradition from the Roman supremacy and supposed Roman alterations of Catholic doctrines joined with additions of new doctrines, all embodied in the decrees of the Council of Trent, not acknowledged as œcumenical, because the Greek Church and the Church of England had no part in it. There was a vision before their eyes of the church of the Fathers, the church before the division of east and west. There was a natural and strong attachment to the Church of England in those who had been brought up in it, and a deep desire to vindicate its rights as a part of the church catholic and as essentially the same with the Church in England, as it existed from the time of St. Augustine to the time of Cranmer. There was a dream of the restoration of unity in Christendom, by an œcumenical council which should harmonize all differences between Latins, Greeks and Anglicans, effect a new and catholic reformation, draw in all Protestants, and inaugurate a new era for Christianity. In the meantime, all efforts should be made to catholicize the Church of England, and to promote amicable relations with the churches of the east, with the hope that western Catholics might gradually be inclined to look with a more favorable eye on the sister estranged and disowned, who was sitting apart in the cathedral of Canterbury and the colleges of Oxford. In America, a similar group of young men lent an eager ear to the Catholic chant which was taken up and repeated on this side of the Atlantic. For the same reasons which were operative in

England, those who were aroused and fascinated by the new Catholic war-cry, wished to remain in the Protestant Episcopal Church and yet be Catholics, with Catholic principles and holding Catholic doctrines. The Roman Church was foreign, alien and remote to them. English literature and English sympathies had determined their opinions and sentiments from childhood, and even if they had not been brought up in the Episcopal Church, these influences had brought them into its communion, as the home of their ancestors and congenial to their ideas and tastes. group of Neo-Catholics was formed in New York, where Bishop Hobart had prepared the way, and particularly in and about the seminary, where Mr. Whittingham was a professor. He was still a young presbyter, but he was a very learned man, well fitted to attract his pupils and win their admiration and devotion, precisely the one to whom they would look as a leader and a guide. It would seem that he might have been for his pupils at the seminary and the young clergymen resorting there, and after he was made a bishop for the young clergymen whom he attracted around him in his diocese, such a leader as Newman was at Oxford. For a time, he appeared to hold such a position. One of his pupils, Arthur Carey, a youth of remarkable parts and character, was very far advanced, like Richard Hurrell Froude, on the way toward becoming fully and completely a Catholic, although both died prematurely, without having taken the last decisive step. Carey was subjected to a most rigorous examination before ordination, and although he was passed by the majority of the examiners and his bishop, who thereupon ordained him deacon, two presbyters publicly protested against the act and walked out of the church. An intense excitement and a lively polemical war followed this event. Bishop Whittingham ardently espoused the cause of Carey and was most anxious to draw him to his diocese. For some time, he was equally sympathetic with other young clergymen who had been drawn into the Oxford movement, and was looked up to by them with confidence and hope as one who would lead them in the way of Dr. Pusey, Mr. Newman, and the others who were advancing on the Catholic road. It is well known how the party kept advancing, some going very near the gate of the Catholic Church and then pausing or receding, others going through, in many cases even to the Catholic priesthood, in a few, attaining the dignity of bishops and cardinals of the Holy Roman Church. If Bishop Whittingham did not recede, he at least ceased to advance; and he became more solicitous to check the Romeward movement, to defend himself from the danger of ecclesiastical censure, and to hinder ritualistic innovations, than to propagate those semi-Catholic doctrines for which he was so zealous in the beginning. He stopped to entrench himself in the old High Church position. But it was impossible to persuade all who had embraced Catholic principles, and some Catholic doctrines to halt in the middle ground between pure Protestantism and authentic, consistent Catholicism. A great crowd in England, and a smaller number in America, went back to the old church which their forefathers had abandoned, either by a wilful apostasy, or a weak and listless yielding to force and fraud. They had been deluded for a time by the specious pretext of a Catholicity more Catholic, and an antiquity more ancient, and had striven to live or exercise the ministry as Catholics, until they found by experience that they had been deceived by an amateur catholicism, partially and grudgingly tolerated in a church which was essentially and unalterably Protestant.

Some of the converts had been numbered among the clergy or the disciples of Bishop Whittingham, who naturally felt their loss very keenly, and also feared that his own position was compromised in the opinion of the public, as having maintained the premises from which they had drawn the logical conclusion. This may explain the violence of his language, some specimens of which disfigure the pages of Mr. Brand's biography. Of course, the biographer is merely narrating and need not be supposed to approve the damnatory sentences fulminated against the Roman Pontiff and those who preferred to submit to his authority than to the private opinions of Bishop Whittingham. Mr. Brand, however, in his own person, although usually mindful of the canons of propriety and good taste, sometimes lapses into a dialect which we must be excused for calling vulgar, using such terms as "Romish" and "papist." On the other hand, in relating one instance of conversion, he writes: "suddenly he announced that he was a Catholic." i., 435. We do not impute any personal resentment or bitterness to Bishop Whittingham. We think he was sincere and conscientious in his convictions about the Roman Church, and was therefore compelled by consistency with these convictions, to regard converts as worthy of severe censure. He had a sort of puritanical spice in his religious constitution, which made it impossible for him to preserve respect and personal friendship for Newman, Ives, Baker, and others whom he regarded as deserters. Therefore, there was no course open for those who had been his personal friends, except to abstain from all further intercourse with him. Dr. Pusey, Bishop Doane and other Protestant clergymen have taken a different attitude. But we do not think that any converts who have been Bishop Whittingham's personal friends, and to whom he had been formerly kind, have ever cherished any other than amicable sentiments towards him, or been

disposed to make a harsh judgment of the motives by which he was governed in his polemical course against the Church which they revere and love as the Church of God. At least, we can answer for ourselves.

Of course, Mr. Brand, regarding conversions to the Catholic Church as "perversions to Romanism," and being obliged to mention some of them in his narrative, had to say something of the causes which led to them; to account in some way for the fact that the "catholicity more catholic" than Roman Catholicity lost its hold on some minds and hearts.

Feeling that he was skating on thin ice, he has glided over it as quickly and lightly as possible. Let him speak for himself, and every one will see that he is mild and courteous, and also very weak.

"The position of Bishop Whittingham as a churchman, which made him to be suspected and opposed by evangelicals in his diocese and out of his diocese, made him an attraction to those who, with him, had been trained in the school of Hobart, or who had felt the influence of the Oxford movement. In the earlier half of his episcopate, high-churchmen sought employment in Maryland, and were content to make sacrifices for the support of sympathy. Especially the young, whether from abroad or Marylanders, gathered around the bishop and had their enthusiasm for catholic truth kindled by his zeal. Is it a matter of surprise that what he helped to kindle he could not always temper? That in Maryland as elsewhere, zealots for Catholicism chilled by necessary contact with Protestantism, listened to the claims of Rome and persuaded themselves that the escape from all that had been felt as a hindrance was to be found in a system which promises peace in return for entire self-abnegation?

"What is it that leads men to the abandonment of our church for that of Rome? So far as my experience reaches, it is a desire for what, in worship and mode of teaching, is believed by them to be our catholic inheritance, because seen to belong to ages which we designate as primitive and claim to be our model. That is, it is not a doubt as to their rights, but a feeling that they can, elsewhere better enjoy their rights.

"Mr. Baker's reasons, as given to his quondam bishop, however moving to himself, seem very inoperative; sentiment is not communicable by way of argument. More than one friend has been converted by a dream; how can one oppose such a motive? From the church men have turned to Quakerism, as to a system better suited to their spiritual needs; others have become Irvingites, or Swedenborgians. The bias of a man's mind inclines him to one error or its opposite. The papal system is not a thing of

chance. On a true foundation it was built up by men, and therefore men of like mind find in this seeming temple of God what is
suited to their nature. With a show of the supernatural, it is
especially rational. And as men found it to meet the demands of
reasoning, so men are ready to accept it who cannot face a doubt
or difficulty which is unremoved by God." 1

To say that the Catholic system is especially rational is to give it high praise. Also, that it corresponds to the demands of human nature. If the whole Catholic theology has been framed to meet the demands of reasoning, it would seem that those who have embraced it for that very purpose, because they were unwilling to face doubts, in the sense of adhering to a system which appeared to them incapable of removing those doubts, must have had some reasons to adduce for themselves, besides dreams and sentimental considerations. And Mr. Brand's way of eluding the difficulty in his path is manifestly trivial when we reflect on the whole library of books which have been published by Roman, German, English and American converts, in the entire Catholic controversy. in this last fifty years; to say nothing of those produced in earlier times by Bessarion, Leo Allatius, Campion and others, and the voluminous works of writers who were not converts, from Bellarmine to Wiseman. It is undoubtedly true that Catholics, Anglicans and members of various Protestant churches have wandered away into all kinds of strange sects, and that this mere fact proves nothing either for or against any particular system of religious belief. But, although this is perfectly true, it is perfectly irrelevant to the case Essential intellectual changes in the convictions and beliefs of educated and serious men are produced by the abandonment of principles which they formerly held. No one ever adopted the heliocentric theory by following out the geocentric theory to its conclusions; and vice versa, no one could be led into the abandonment of the Copernican system for the Ptolemaic by following up the principles of Copernicus, Galileo, Newton and later astronomers. Many intelligent, educated, and pious men, who loved the Church of England and were held in it by many and powerful motives, having imbibed Catholic principles and embraced Catholic doctrines through the study of Anglican divines and of the fathers, by the force of these teachings, the maturing of their convictions and the effect of earnest efforts to live up to this belief, have advanced steadily, often very gradually, to the firm conclusion that genuine and complete catholicism is only to be found in the Roman Church. They have been men of very different temperaments, of various professions and in dissimilar

¹ Ibid, p. 434, etc.

environments, following distinct roads among the many which lead toward Rome and find there their point of convergence. Some have made sacrifices, even severe ones, in obedience to the voice of conscience. It is impossible to do away with the force of the practical evidence furnished by the number and quality of the conversions of the last half century that they were the legitimate, logical, and moral result of the Oxford movement. Such is the judgment of all observers of the rise and progress of this movement in the surrounding world, except those who belong to the small party of high-churchmen.

The truth is, that instead of reasons being required why one who believes in the One, Holy Catholic and Apostolic Church should join the communion of the Roman Church, reasons, and very decisive ones, are requisite in order to convince such an one that he can reasonably and safely remain out of it, and a fortiori that it is his duty to leave it, or to abstain from joining it.

The process of conversion, for one who has imbibed catholic principles and high-church doctrines, is one by which obstacles and impediments are removed, the mind freed from prejudices and misapprehensions, and a true idea is gained of the ancient, the mediæval, and the modern Catholic Church. When this change of perspective and clearing of the atmosphere from mist has taken place, one either bravely follows his conscience and passes through the gate which admits him into the temple of God, or he hesitates and begins to look about for an excuse to remain outside. Very often he makes a retrogade movement, and having seen where his catholic principles logically and consistently lead, falls back upon Protestantism, or even Rationalism.

Mr. Brand evidently has no idea of the Catholic position of St. Cyprian, St. Athanasius, St. Augustine, St. Bernard, and all the fathers, in contradistinction from the position of ancient and modern Protestants. What is this position and its advantages? It is briefly this, that God had made the Ecclesia Docens an infallible teacher and judge in faith and morals for all places and times. The advantage is that it gives to all men a certain and easy proximate rule of faith and a sure guide in the way of salva-There is only one question to be answered, for one who believes in the divinity of Christ and His religion. What is the proximate rule of faith? If that question is answered in the Catholic sense, he has only to believe and obey what the Catholic Church teaches and commands. If, in the Protestant sense, he must find out for himself as best he can, what the Bible teaches. The middle position of semi-Catholic Anglicans does not relieve him from this difficult task. It offers him the ancient Christian tradition as a guide and aid in ascertaining the true sense of the Scriptures. But this only doubles his task. For he must ascertain for himself what is the genuine, authentic Catholic tradition, amid all the controversies of Latins, Greeks, Anglicans and various kinds of Protestants.

It is like walking a slack rope stretched between two high towers, to attempt to be a Catholic after the manner of Mr. Brand and Bishop Whittingham. Practically the rule of Bishop Whittingham amounted to this: "Obey the Catholic Church, known as the Protestant Episcopal Church in the United States of America, and personified in me, the Bishop of Maryland." This is, indeed, an intolerable servitude. Whereas, to obey the Bishop of the Catholic Church, the successor of St. Peter and the Vicar of Christ, the rightful and unerring spokesman of Catholic tradition, of all the œcumenical councils, and of the Ecclesia Docens, infallible in all its ordinary as well as its solemn teaching of the doctrine of faith and morals, is a most reasonable service, worthy of the most intelligent and learned, as well as of the most simple and untaught Christians.

A catholic spirit cannot begin to stir in a religious community which is isolated from all the rest of Christendom, without awakening a restless desire to escape from this isolation. It is not enough to seek communion by reading with the historical church of the early ages, or to dream of a reunited church of the future. The longing for some present actual fellowship with Christians of other countries is irrepressible. Naturally the Episcopalian high-churchman with catholic tendencies turned toward St. Petersburg and Constantinople, toward Syria and Greece, with the hope of gaining some sympathy and recognition from Episcopal churches, separated like themselves, from the communion of Rome.

One of these experiments was the mission of Bishop Southgate to Constantinople. The plan was to establish the bishop with a presbyter and a deacon, who should engage to remain single, in a residence containing a chapel, where divine service should be celebrated with as much ceremony as the rites and customs of the Episcopal Church admit, and where carefully-prepared sermons would be preached, in the hope of attracting the native clergy to attend these services. A theological school was to be opened for the young ecclesiastics and a press put in operation for circulating tracts composed of extracts from the Greek Fathers and translations from Anglican divines, or original compositions of the gentlemen of the mission. The object aimed at was the cultivation of such relations with the Oriental clergy that they might be brought to recognize the orders and the orthodoxy of the Episcopal Church and also to receive a mild dose of Protestantism for the improvement of their own orthodoxy. There was one fatal blunder committed at the outset which was sufficient by itself to ruin the whole scheme. Instead of placing an unmarried clergyman in the Episcopal chair and leaving Mr. Southgate, who was a married man, to the secondary place of a presbyter, Mr. Southgate was consecrated—a measure abhorrent to all Orientals—and celibacy was imposed on his clergy, which is not considered as necessary in the Greek rite. The enterprise proved to be a flasco; Bishop Southgate returned to America to become a parish rector, and his son is now a devoted, self-denying, hard-working Catholic priest in the diocese of Baltimore.

We had the honor to be selected by Bishop Southgate as his deacon, on the recommendation of Bishop Whittingham, though the appointment was not confirmed by the Missionary Committee. While we were in New York making preparations for the expected voyage, we called on Dr. Seabury, who questioned us closely as to the methods we intended to follow in our efforts to bring about intercommunion with the Orientals.

"Do you intend to persuade the Greeks to modify any of their doctrines and practices?" "I suppose we must do so." "What are they?" "Chiefly, I should think, the invocation of the Virgin and the saints, and the veneration of images." "But all their doctrines and practices on this head are sanctioned by the second Council of Nice, which they receive as the seventh Œcumenical Council." "That is not an Œcumenical Council." "There is just as much reason to call the seventh council Œcumenical as any of the first six. What reason can you give for rejecting it?"

If the Greek and Anglican Churches could be united one would have to conform itself to the other. The Greeks will never come down to the level of Anglicanism. Will the Church of England come up to the Greek level? Will she receive the seventh Council? The eighth Council stands on the same solid ground with the seventh. It is a significant fact that the Greek Church canonizes the Patriarch Ignatius, but has never thought of paying honor to Photius or Michael Cerularius, the authors of her schismatical rebellion against the See of Peter. The Councils of Lyons and of Florence have all the œcumenical characters which a Greek or an Anglican can demand. There is no standing-place, no haltingplace where one can take his position and say: "Up to this point the Church was infallible, and held councils which were œcumenical and infallible; but afterwards this supreme authority was lost or suspended." This is a surrender to Eutyches, Nestorius, and Their case is as good as that of Photius, Cranmer, and It is absurd to suppose that a certain number of bishops, by falling away from the unity of the Church, can deprive her

councils of the prerogatives of a supreme tribunal. From Chalcedon to Florence, Trent, and the Vatican, the king's highway is straight and solid. The first and the last of the Œcumenical Councils are indissolubly bound together. Either both must be accepted or both rejected. For one who takes the latter alternative and still wishes to remain a Christian, there is no refuge except the dreary waste of Protestantism—the Protestantism of Arius, Nestorius, Eutyches, John Calvin and Martin Luther.

Every one who holds to the principle of the hierarchical organization of the Catholic Church must deplore the separation of the Greeks and Protestants from the communion of the Roman Church as a great disaster, and desire the restoration of unity in Christendom. Not only so; but all those who profess to believe in the divinity of Christ and in Christianity as a supernatural religion, must deplore the divisions and dissensions which alienate professing Christians from each other. There is a great cry from all quarters for unity among Christians. But what are the prospects of this dream being realized and what the principles and methods by which such a unifying process can be even commenced?

Is this general union to include or to exclude the Roman Church? If the former alternative is taken, is there any one so credulous as to suppose that the Roman Church will ever abjure those Councils, from the fourth of Constantinople to the Vatican, in which her supremacy has been affirmed and vindicated against all who have raised the standard of revolt against her in the east and in the west? There is but one way of reconciliation with Rome: to heed the invitation given by Pius IX. when he convoked the Council of the Vatican, and undo the sad work of the Photian schism and the Protestant revolution.

If Rome is to be left out in the scheme of reunion, is there any one who imagines that all Protestants can be brought to seek reconciliation with the Patriarch of Constantinople on his own terms, or that he can be induced to reconcile himself with the Archbishop of Canterbury on an Anglican level? Can any sane person be credulous enough to expect that the Protestant Episcopal Church will absorb all the great denominations in the United States, or the Church of England annex the Presbyterian churches in Scotland? The Protestants on the Continent of Europe, are they going to sue humbly for orders to so-called bishops of the apostolical succession, whose ordination is not acknowledged by either Latin or Greek bishops?

Or, perhaps, is there to be an amicable agreement to drop all doctrinal and disciplinary questions of difference, and live in harmony, in perfect freedom of belief and practice?

Of late years the Oxford, or High-Church, movement has as-

sumed various phases and given rise to many divergent views and opinions. A considerable number of its adherents have approximated toward the Roman Church, not only in their ritualism, but also in doctrine, in respect for the Holy See, and in a desire for a corporate reunion of the Church of England with Rome. One very strange and peculiar set of men among them have struck out a new path which would have brought upon their heads the most vehement anathemas from Bishop Whittingham if he had lived to witness their procedure.

Abandoning the old line of a most strenuous defence of the validity of Anglican orders, they have given up all reliance in orders and even baptism in the Church of England as doubtful and untrustworthy. They have sought a rehabilitation by resorting to the bishops of the little sect of Oud-Katholiken, in Holland, for a conditional reiteration of baptism, confirmation, and ordination, a few having even received Episcopal consecration. They have thus set up a little church within a church, freely imparting to all seekers what they have themselves received. We have been credibly informed that Dr. Mossman was one of their bishops, and was received into the Church by Cardinal Manning, on his deathbed. How this step can make any essential change in their relations to the Catholic Church, we are at a loss to imagine. It is not the invalidity of orders which is the matter of chief moment and the principal ground for excluding the Church of England from Catholic communion; it is the heresy and schism, which remain the same, and are equally destructive of the vital principle of ecclesiastical unity in societies governed by a validly-ordained clergy as in those which have lost the succession. The Novatians, Donatists, Arians, Nestorians, and Monophysites had valid orders, yet were completely cut off from the Catholic Church. Their bishops had to be reconciled, and to be formally received as aliens; and it is the same now with those who belong to the Eastern sects. All efforts to effect a union or construct a unity by human plans are doomed to failure. The Lord has built his Church, once for all, on the Rock of Peter. All schism has begun by rebellion against the supreme authority of the successor of St. Peter, and all heresy by departing from his doctrines. There is no cure for these great evils except a return to his obedience.

Nevertheless, we do not wish to speak with disdain of the yearnings and aspirations after Christian unity which have been stirring the hearts of the nobler and more magnanimous of the estranged children of the Catholic Church, who have been separated from her communion by the crime of their ancestors.

It was a fearful and disastrous calamity which separated so many flourishing provinces of the Eastern patriarchates, between the fifth and eleventh centuries, from the Apostolic See of St. Peter. It was a similar calamity which befel the immediate Western Patriarchate of the Pope during the sixteenth century. This religious cataclysm has made a wide chasm which it is difficult to cross over or to fill up, and which has been yawning for centuries. That Russia and England should return to the communion of the Holy See would seem to be, like the conversion of the Jews and Mohammedans to Christianity, hopeless; unless we could look up to a power which can accomplish what is humanly impossible.

If we hope that this most desirable gathering of all baptized Christians into one fold, under one Shepherd, is in the designs of Divine Providence, we must regard even the vague and visionary anticipations of union among Christians, but, especially all longings for a unity whose centre will be Rome, as encouraging signs of a future reconciliation and remote predispositions for this desirable result.

Among the more enlightened Orientals these signs have appeared in the past, as well as in more recent times. The Greeks have never had any idea of a unity embracing East and West, in which Rome is not the centre, and have always acknowledged a primacy, at least, de jure ecclesiastico, in the Roman Pontiff. The Emperor Alexander I., of Russia, was planning a reunion of the Russian Church with the Holy See, when a premature death ended his reign; and he received the last sacraments from a Catholic priest. Many of the principal clergy and laity of the Russian Church have Roman tendencies; some Greek bishops kissed the letters of invitation to the Vatican Council with tears of devotion, and all over the East there are signs of a desire to return to unity stirring the ignorance and apathy into which those oppressed and unhappy peoples have sunk.

In Germany, not to speak of illustrious converts like Hurter and Stolberg,—Leibnitz, Leo, and others have led the way in an approach toward Catholicism. In our own country, Dr. Leonard Woods, Jr., and some associates of his have made a similar approach. There has been a general and remarkable increase of candor and liberality of views and sentiments, an increase of the historical spirit and of sympathy with historical christianity, which we recognize with pleasure. The spirit of bitter and violent animosity against Rome still survives in religious and political factions and makes occasional demonstrations. But it is far less universal and dominant than it has been in former times. Among High Churchmen that view of the Catholic Church which represents it as existing in three great branches which are essentially one, has modified that sectarian opposition to the Roman Church which we

have seen so strongly exhibited in Bishop Whittingham; and has opened the way to a recognition of the claims of Rome on the gratitude and veneration of all Christians. Those Protestants who occupy a lower and broader ground have very generally enlarged their views of Christianity and the Church, so as to include all the divisions of professed believers in Christ who are sincere and upright. Canon Farrar, preaching in Trinity Church, New York, put entirely aside the notion that the Protestant Episcopal Church is the Church of America. The American Church, according to him, includes Catholics and the various kinds of Protestants. The narrow, sectarian notion that the Episcopal Church, or the Presbyterian Church, or any sectarian denomination, is the only true Church of Christ, is one that can never more gain a There is a universal demand among those who retain more or less of Christian belief, and who do not possess the original and genuine idea of the Catholic Church, for some kind of allembracing Christianity which presents a plausible appearance of catholicism. The sects and confessions which are the offspring of the Lutheran revolution are breaking up, and definite doctrinal systems are evaporating. There is, moreover, a circumambient sea of rationalism, skepticism, agnosticism, invading all the coast-line of Christianity. The great Protestant denominations, and the large number of able and learned men whom they have produced, have formed a strong and serviceable breakwater against this incoming tide. To a certain extent, this is still the case. Nevertheless, by the irresistible logic of facts, and by the working of the law of evolution, the revolt of Luther against the authority of the Church must go on in its destructive course so long as its principles remain a living, active force.

All those who revere the name and the religion of Jesus Christ must admit that there is much which is sad and dark in the present aspect and the immediate prospects of Christendom. When we consider the great outlying world, which is not Christian, what probability can we see that any means at present employed for the conversion of this great majority of the human race can have any greater success in the near future, than they have had during the centuries which have elapsed since Christendom attained its present limits? Every Christian must believe that a regeneration of Christendom, and a conquest of Christianity over Judaism, Mohammedanism and Heathendom is possible with God if he chooses to put forth again that same almighty power by which he brought the Roman Empire under its benign sway. Every one must hope that he will do it. At the same time it is impossible to question the fact that division, disunion and civil war among the great bodies of professed Christians is the most serious obstacle in the way of the practical influence of the Christian religion upon the mass of nominal Christians, and in the way of the triumph of the Gospel in the world at large. It is evident how much the power of religion would be augmented, in our own country, if all those who have some Christian belief and some practical Christian principles of life were united, and all the intelligence, learning, zeal and wealth to be found among them were concentrated upon efforts to promote the spiritual and moral welfare of their countrymen and of their fellow-men. If this unity were universal in Christendom, we might hope to see the nations which are nominally Christian become really Christian, so that of each one it might be said with truth, Beatus populus cujus Dominus Deus est. Missions to the heathen would present a different front, and make a far greater impression, if all missionaries taught one and the same doctrine and labored in harmony under one direction.

One fact is plain and palpable. It was apostolic Christianity which gained the first triumphs in the Roman Empire, and historical Christianity which gained the triumphs which followed. The same Christianity which triumphed in the beginning is the only power which can complete the victory of the religion of Christ in the end. The one all-important question to be decided is, therefore, what is the genuine apostolic and historical Christianity? In and through this alone is Catholic unity possible.

AUGUSTINE F. HEWIT.

LATIN HYMNS AND ENGLISH VERSIONS.

Dies Iræ; The Great Dirge of Thomas de Celano; Latin Text with a Strict Prose Translation; and Three New Versions in Rhyme; With a Brief Account of the Hymn. By Melancthon Woolsey Stryker. Fleming H. Revell Co., New York and Chicago. 1893.

THIS latest addition to the literature of hymnology is mentioned here not for the purpose of review, but as a convenient text for some observations on the subject of Latin hymnody and for some critical remarks and suggestions in the matter of the translation of Latin hymns. The text will serve this double purpose. For the Dies Ira, although by universal consent the monumental Christian poem, may well stand as the embodiment of the prevailing spirit of Latin hymnody—filled as it is with the spirit of faith, of hope, of love; and mingling tears with trustfulness, penitence with the hope of pardon. Besides this, it has the unique honor amongst all hymns, of having exercised the genius of the most accomplished poets and versifiers in the attempt to present it fairly in the vernacular, and of having signally baffled, with a sphinx-like grandeur, the endless questionings into its secret power. Up to the present time, America alone has furnished one hundred recognized versions; while those which, hiding in the safe retreat of the desk, or emerging from it only to be lost in the obscurity of a local newspaper, have eluded the vigilance of the census-taker, would doubtless raise the total of translations to a much higher figure. Certainly, no other hymn has been rendered so many times into the vernacular; and it is fair to assume that the versions which have gained recognition were the best of their kind. This double fact is instructive; for the larger the number of versions, and the greater the talent and industry expended on them, the more patent becomes the difficulty, nay, the impossibility of preserving in any one translation the many charms of the original—the stateliness of its measure, its simple sublimity, its intense pathos, its lyric sweetness, the solemn blending of its tears and prayers, its sad forebodings and its tender confidence. In the sum of these peculiarities, indeed, the grand old hymn stands alone. Nevertheless, as it contains many discernible elements of the difficulty just alluded to, and shares them with all Latin hymns, it may serve as a type of the obstacles encountered by translators of the Church hymns, and as a text for some suggestions on this subject.

The history of our polyglot hymnology opens up to our eager gaze the long vista of Christian song commencing with the Magnificat anima mea Dominum—worthiest and most prophetic of texts for the grand choral praise of the centuries!—a vista which constantly widened and deepened as the succeeding years heard, first the flexible tongue of the Greek, then the deep-breathing voice of the Syrian, anon the musical cadences of the Latin, again the fresh vigor of the Celt, the broken accents of early English, the heavy tones of the Old German, the rich melody of the Italian, the energy of the Bohemian. Thus up to the sixteenth century. Discovery, colonization, and missionary enterprise gave a new burden to the songs of the remotest peoples of America and Asia; and these, together with Africa in our own day, have added new strength and wider channels to the full tide of song.

It does not belong to the scope of this paper to discuss at any length the history of hymnology; to point to the gradual growth and ecclesiastical recognition of the "Thesaurus Hymnologicus," the commentaries and expositions that grew up around it, the critical labors of such names—illustrious in this branch of study -as Clichtove, Massorillo, Cassander, George Fabricius, of the sixteenth century. With these names the work of exposition did not commence, indeed, but became of greatest value to subsequent investigators. Long before this era the work of exposition had begun. The ancient Irish Church had its "Liber Hymnorum" with explanatory comment on all the hymns. In the British Museum there is an English hymn-book of the eleventh century in which the hymns are printed with interlinear paraphrase; and another of the same century which simply indicates the hymns, but furnishes besides a consecutive prose version. Such expositions, quite common before the invention of printing, became afterwards very widely used. The sixteenth century, however, witnessed the birth of the great movement in critical and exegetical hymnology which, in the varying religious beliefs of its personnel, became the type of a similar literary activity in our own day.

Between these two epochs very little in the way of translation was accomplished that needs mention here. The first versions into English are to be found, says Rev. Prof. Thompson, in the "Primer" of 1545, a book of private devotions. Mr. Orby Shipley has gathered in his "Annus Sanctus" a number of the earlier English versions. A few translations are associated with illustrious names in the same period of relative inactivity—Dryden, Crashaw, and Lord Roscommon; while a partial paraphrase of the Dies Iræ in the "Lay of the Last Minstrel," brought Sir Walter Scott's name into connection with the subject vol. XVIII.—18

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of hymnology. The beginning of the latter-day revival in this study was associated with, if not caused by (as Dr. Thompson would have us believe) the Oxford movement in the Anglican communion. It has been asserted that in Germany a similar impulse was communicated by the Romanticist fraternity of litterateurs. Whatever may have been the cause, it seems to have been a general one, at least in England. Speaking of the religious revival, John Henry Newman wrote, in vindication of his famous Tract No. XC: "I always have contended, and will contend, that it is not satisfactorily accounted for by any particular movements of individuals upon a particular spot. The poets and philosophers of the age have borne witness to it for many years. Those great names in our literature. Sir Walter Scott, Mr. Wordsworth, Mr. Coleridge, though in different ways, and with essential differences one from another and perhaps from any church system, still all bear witness to it. The system of Mr. Irving is another witness to it. The age is moving toward something, and most unhappily, the one religious communion which has of late years been practically in possession of that something, is the Church of Rome."1 He builded better than he knew. The "Church of Rome" could furnish, from her magnificent treasury of hymns, one part of that "something"—that everything—which she possessed, and which the world hungered for. And so the names of Isaac Williams, Rev. John Chandler, Bishop Mant, Rev. Edward Caswall, Dr. Newman, John Mason Neale swelled the list of translators of Latin hymns which of late years has become well-nigh endless.

With the first volume of his "Thesaurus Hymnologicus," published in 1841, Hermann Adelbert Daniel, one of the masters in the Pædagogium at Halle, may be considered as opening the brilliant chapter of the last fifty years of work in the field of critical and general hymnology. The first volume was devoted to Latin hymns. Vol. II. appeared in 1843, containing a large number of Sequences. In 1855 appeared Vols. IV. and V., as supplements to the first two volumes. In 1853 Mone's "Latin Hymns of the Middle Ages" (Lateinische Hymnen des Mittelalters) was published in three volumes—a work which supplied Daniel with much of the matter of his two last volumes. Daniel's work labors under many drawbacks from poor arrangement and confused indexing, but is still considered as invaluable in several respects.

In hastening to speak of this latter epoch, we must not overlook the great labors of Cardinal Bona, Muratori, Cardinal Thomasius who had already brought to light many rare and valuable texts, and discussed with great skill the vexing questions of au-

¹ Quoted in Duffield's Latin Hymns, p. 412.

thorship: Mart. Gerbert in his "Scriptores Ecclesiastici de Musica Sacra," a product of unwearied research; Faustino Arevalo in his "Hymnodia Hispanica"; Rambach in his "Anthologie"; Björn, who took account of the earliest hymns; Follen, of "Hymns of the Later Middle Ages, or by the Jesuits"; Mohnike, in his "Studies and Expositions"; Hoffmann von Fallersleben, in his treatise on the history of German hymns up to Luther's time; and many others. In 1844, Migne's "Patrologiæ Cursus Completus" was published in Paris. It is an endless storehouse of Christian poetry. But the gleaning goes on still, and the diligent and painstaking Ruth may find many an ear of unharvested wheat in the wide fields of hymnology. And surely the last fifty years have witnessed the most wonderful activity in the domains of general and special hymnology. As a distinct epoch it stands unrivalled for the number of its collections and treatises, and the scholarship and patient research of its devotees to church-song. A careful bibliography of its triumphs would fill many of these pages. would include the names-famous, many of them, in other lines of thought-of Wackerbarth, Du Meril, Simrock, Königsfeld, Trench, Caswall, D. Ozanam, Schlosser, Neale, Gautier, Shipley, Wackernagel, Koch, Duffield, Kehrein, March, Kayser, Weale and Julian. This study has opened up and eagerly pursued every avenue of research, and has expressed itself in every literary form. It has been historical, biographical, classical, curious and critical. It has found a willing clientèle amongst churchmen and laymen, humanists and professional men. It has produced brochures and many-tomed works. The original hymns written in the vernaculars in the same period have been nearly endless. It has been estimated that the number of original hymns and translations existing at present in the various languages and dialects cannot fall far short of 400,000—an embarras de richesse! And yet, despite the large and constantly increasing literature that surrounds the subject, it has, perhaps, seemed to the casual observer to imply a very special and recondite erudition, and to be the gratification rather of an antiquarian than a utilitarian impulse. But granting something of truth to this estimate, still we cannot fairly deny the great good which has resulted from the study in an historical and literary, and even a devotional point of view.

Now, while this extraordinary movement has been concerned as well with the history of hymns in the vernacular as of those in the classic tongues, and while its *personnel* has been very notably, indeed, preponderatingly, Protestant, it must be deemed worthy of special note that the greatest amount of attention and sympathetic care has been expended on the elucidation of Latin hymns, on the verification of the minutest details of their history, and in criti-

cal discussions of their authorship. The activity has not, however, been wholly antiquarian in character. The hymns have been translated many times, and have found their way into the public religious services of the various Protestant sects. The most dogmatic of Catholic hymns, e.g., those in the office of the Blessed Sacrament, have been altered in tone, and have found a prominent place where we should scarce expect to find any, even the remotest flavor of "Romanism." One author, indeed (Chancellor Benedict, in The Hymn of Hildebert, etc.), has translated the "Lauda Sion," that collection of dogmatic theses, with scrupulous literalness, and in apology therefor has attempted to wrest the one characteristic spirit of the text from its evident literalness into a "spiritual sense." Speaking of St. Thomas, he says: "It is but just to say that he doubtless intended that his words should be understood, according to the faith which the Roman Catholic Church now teaches; but it may also be said that the hymn might have been written by a Protestant, in the same words, without doing violence to the faith of the Protestant Church, although it does not fully express that faith; and I have preferred to translate it in that sense."

To what shall we ascribe this surpassing attraction of our hymns for such hearts and such intellects? The answer is to be found in a comparison between the hymns of the Church and those of the sects. Such a comparison would show us how much more fully the former satisfy all the essential requirements of a "hymn" than do the latter; and why, therefore, they should be sealed above their fellows with the seal of fairest worth and of perpetual youth. Any elaborate comparison between the two repertories, Catholic and Protestant, would not only be odious but tedious. And, besides, it would be as easy as it would be unfair to place side by side, for the sake of emphasis, the poorer amongst the vernacular hymns with the better amongst the Latin hymns. But if we were to compare the worst selections from both, it would be hard not to award the palm of lesser demerit to the Latin. However unclassical, unrhymthical; however rude in phrase and inartistic in form, the hymns which are given only in title in hymnologic collections, were at least prompted by the same deep, clear, dogmatic faith which, in its most poetic expression, became the monumental "Hymns of the Ages." They have, besides, the extrinsic charm of an unknown authorship. They were the unheard cries of some devout soul whose moment of "sensible" devotion found commemoration in the lonely and untoilsome verses that minted the rough ore of his after-thoughts. He builded not for the culture of this "age of progress," not even for his own age of piety, but for himself alone, or at most for the little fraternity of some monastery of the wilderness. The vanity was a poor one which could have moved him to such a task! But in our day the glamour of publicity might easily prompt to the composition of hymns. And this may be one of the reasons why the endless catalogue of modern hymns should present to the devout hymnodist an embarrassment quite other than that of wealth.

So much for the poorest of the Latin hymns. But if we compare the best of them with the best of the vernacular hymns, we need not rely on the testimony of Catholic piety or prejudice for the award of highest merit. Protestants of all shades of religious opinion have given both direct and indirect praise of the highest kind to the grand songs of mediæval Catholicity. The title of the book placed at the head of this article is the latest contribution to the indirect praise. In the case of a literary work not only imitation, but translation, as well, is the sincerest flattery. The Dies Ira, the Stabat Mater, the Eucharistic Hymns of the Angelic Doctor, the Jesu dulcis memoria and Salve Caput Cruentatum of St. Bernard of Clairvaux, the Laus Patriae Coelestis of Bernard of Cluny, have become famous merely in translation. Those who can appreciate the rhythmic pulses, the intense pathos, the honeyed sweetness of the originals, find a theme of admiration and a certain ecstatic praise which, coming from Protestant sources, must be considered a direct testimony of the greatest weight. The Dies Iræ has the most prominent place in this chorus of approbation. Daniel calls it: sacrae poëseos summum decus et Ecclesiae Latinae Keimelion pretiossissimum. Dr. Coles, who has translated it some sixteen or seventeen times, says: "Among gems it is the diamond. It is solitary in its excellence. Of Latin hymns it is the best known and the acknowledged masterpiece." Dr. Schaff in "Christ in Song," says: "This marvellous hymn is the acknowledged masterpiece of Latin poetry, and the most sublime of all uninspired hymns." Says Trench in "Sacred Latin Poetry:" "The metre so grandly devised, of which I remember no other example, fitted though it has here shown itself for bringing out some of the noblest powers of the Latin language, the solemn effect of the triple rhyme, which has been likened to blow following blow of the hammer on the anvil, the confidence of the poet in the universal interest of his theme, a confidence which has made him set out his matter with so majestic and unadorned a plainness as at once to be intelligible to all,—these merits, with many more, have given the Dies Iræ a foremost place among the masterpieces of sacred song." Of Walter Scott, whose fine paraphrase of a portion of the hymn appeared in the "Lay of the Last Minstrel," Lockhart has narrated this touching death-bed memory: "Whatever we could follow him in was some fragment of the Bible, or

some petition of the Litany, or a verse of some psalm in the old Scotch metrical version, or some of the magnificent hymns of the Romish ritual. We very often heard the cadence of the Dies Ira." And the deeply religious soul of Dr. Samuel Johnson felt so keenly the pathetic allusion of the tenth stanza, "Quaerens me sedisti lassus," as to be melted into tears whenever he would re-The Earl of Roscommon died with the cadences of his own version on his lips. Other testimony might be cited, but enough has been given to place Dies Ira as a monumental hymn. The Stabat Mater has been "deemed the most pathetic of hymns," as the Dies Ira has been considered the greatest. The compiler of "Seven Great Hymns" says: "In fame it ranks next to the Dies Ira. . . . It has attracted the same great admiration and been praised and repeated by the same great admirers, but always in a lesser degree." The last clause reminds us that the devout pleadings to Our Lady, found from the fifth stanza to the end of the hymn, grate harshly on ears sensitive in the matter of praise to the Mother of Jesus. Dr. Coles, in the proem to his Stabat Mater, says: "Some have gone so far as to place it above its great rival (sc. Dies Iræ), but this is not the general judgment, nor is it ours." He thinks "that it owes much of its power to make us admire and weep to the transcendent nature of its theme." He admits, however, that this pathos required the pen of a master to describe. "But however spontaneous and natural,—however true, beautiful, and even poetic,—and however vivid the emotions of sorrow, terror, and pity arising out of these instinctive and uninstructed perceptions, there is a vagueness as well as vividness, and a resulting incapacity to express clearly and adequately what is so genuinely felt. The ability to do this is rare, and rarer still the poetic faculty, whereby the unwritten melody of the heart is accommodated to all lips and sung in all ears. To say that the author of the Stabat Mater possessed this power and achieved this triumph, is to bestow upon him and his work the highest praise." The proem of Dr. Coles is worth reading in its entirety. His sympathetic treatment of his theme can almost make us forget the rude language contained in his second paragraph: ".... while the devout Protestant finds nothing in the Judgment Hymn to jar with his own religious convictions, he is necessarily offended in the Stabat Mater by a devotion he believes misdirected and idolatrous in the adoration which it pays to the Virgin."

The "devout Protestant" needs a schoolmaster or a dictionary. The power of the hymn must be great indeed when it can extort the admiration of those who, at this late day, and in the light of its widely-diffused culture, believe Catholics guilty of the grossness of idolatry or adoration of anything less than God.

Of St. Bernard's hymnody, we may quote the approbation of Duffield in "Latin Hymns:" "The Church universal has made Bernard her own, and the very translations of his verses have been half-inspired." Of the Veni Creator Spiritus, we need not speak; its history both in translation and in the Anglican liturgy speaks its praise with no uncertain voice. Dr. John Mason Neale's criticism of the Pange Lingua will bring other hymns to memory. It "contests the second place with the Vexilla Regis, the Stabat Mater, the Jesu dulcis memoria, the Ad Regias Agni Dapes, the Ad Supernam, and one or two others, leaving the Dies Iræ in its unapproachable glory."

It is another glory in the crown of the Latin hymnody that it has furnished suggestions to the best of the Protestant singers for some of their most meritorious and most popular hymns. Paul Gerhard's Passion Hymn, O Haupt voll Blut und Wunden, received its inspiration in St. Bernard's Salve Caput Cruentatum. The whole rhythmic prayer of the Saint, "ad unum quodlibet membrorum Christi patientis, et a cruce pendentis," could have furnished inspiration for many other exquisite poems; for, as Trench justly observes, "its other divisions are of no inferior depth or beauty:" quae omnia omnes divini amoris spirant aestus atque incendia, ut nil possit suavius dulciusque excogitari, as Daniel puts it. Speaking of the Urbs beata Hierusalem, altered in the Breviary into Coelestis urbs Jerusalem, Trench says: "This poem attests its own true inspiration in the fact that it has proved the source of manifold inspiration in circles beyond its own."

The best apology for the number of these extracts from Protestant hymnologists must be the evidence they furnish of the merits and popularity of our grand mediæval hymns. The very attempts at proprietorship made by these men are convincing testimony to the worth of the hymns. The fiction of an invisible church existing somewhere and nowhere which, dating its birth in the birth of Christianity, and throughout the "Dark Ages" clinging silently, unostentatiously to primitive purity, linked the great revolt of the sixteenth century to the spirit of the apostolic college—this intangible, unintelligible gratuity of imagination tells us at once of both the repugnance our separated brethren feel at our certain ownership, and of the intense attractiveness these hymns possess for their intellects and hearts. So far is their praise from any admission of Catholic truth, of any amelioration of hostility to the Church, that it is made a very occasion of abuse, of insult, and sometimes of calumnious innuendo. "Romish" is an epithet familiar to the lips of some of the best educated amongst them. In the preface to the first edition of Trench's "Sacred Latin Poetry" we find, amongst other determining factors in the matter of selection of hymns for his volume, "... all are excluded, which involve any creature-worship, or which speak of the Mother of our Lord in any other language than that which Scripture has sanctioned, and our Church adopted. So, too, all asking of the suffrages of the saints, all addresses to the cross calculated to encourage superstition, that is, in which any value is attributed to the material wood in which it is used otherwise than in the Epistles of St. Paul, namely, as a figure of speech by which we ever and only understand Him that hung upon it; all these have been equally refused a place."

What so tedious as a twice-told tale?

The tale of Catholic explanation and vindication, the indignant denials by Catholic authority and Catholic laymen of the truth of all the hateful assertions and implications contained in the above quotations, have been of such endless iteration as perhaps to render even this notice of them tedious. Our apology shall be, however, that they accentuate the excellence of that muse whose only fault is that she *must* sing the truth.

The Catholic Church possesses, then, a wonderful collection of hymns and sequences—wonderful both in their number and variety, and in the combination of those subtlest elements of genius and poetic inspiration which alone ensure immortality. Possibly the secret of their charm can be stated in a word—they are hymns.

The question, What is a Hymn? must be answered in terms that postulate, first, a religion that can recognize, and insist upon and perfect the thousand relationships developed towards the Creator by the creature from the high destiny of the latter; secondly, that suppose the adaptability of poetical forms of language, together with their choral drapery, to express adequately the high conceptions born of such a religion; thirdly, that imply the quickening power of divine faith on the intellect, the will, the emotions. To write a hymn—using the word in its general meaning, but in its highest sense—a man must be a Christian, a poet, and a lover of God.

The first essential of a hymn, viz., that it should be Christian, should be a dwelling-place of truth, and should be built on a foundation of truth, may be gleaned from the history of religion. The Sacred Text, while giving a history of true religion, gives also a prominent place in its pages to the service of divine praise. It will include St. Paul's several references to the hymnody of the first Christians; that touching recital of how "an hymn being said," Christ went out with His disciples after the Last Supper, unto Olivet; the choral service of the First and Second Temple; the songs of Isaias, David, Debora, Barac; the long canticles of Mary and Moses by the Red Sea. The retrospect, of which we

have but hinted at a part, closes with the early dawn of creation, when "the sons of God made a joyful melody." Religion it was which first gave the impulse to song; and to chants of divine faith and love were first dedicated the rhythmic cadences and the fine imagery of poetic speech. "If we trace poetry back to its origin," says M. Rollin, "I think we cannot question but it had its rise from the very source of human nature, and was no other art at first than the voice and expression of the heart of man, when nourished and transported with the view of the sole object deserving to be loved, and alone capable of making him happy. This is properly the original of poetry, and herein its essence principally consists. Hence arise the enthusiasm of the poets, the fruitfulness of invention, the nobleness of sentiments and ideas, the sallies of imagination, the magnificence and boldness of terms, the love of what is grand, sublime, and marvellous." The pagans were not slow to recognize the essential province of poetry, and although their dedication of it to the worship of gods that "have ears and hear not" was a prostitution of its high office, still it was an evidence of how the heart clamors for such a vehicle of religious emotion. But the really informing spirit of true poetry was absent; and drawn in the mire of a gross and sensual mythology, it soon fell so palpably from its noble estate, as to furnish suggestions of evil rather than of good; and therefore Plato banished poets from his Republic. The Christian poet reverses the order of Homer. Of the latter Cicero said: "humana ad deos transferebat; mallem divina ad nos." The religious poetry of the ancients was a laughing-stock to the philosophers; they felt no vivifying influences lying hidden beneath the drapery of human invention. The words of many of the classic hymns have come down to our times; but as hymns they have perished forever. The heart of the most cultured infidel classicist feels at this day no quickening breath of emotion, no idealizing of its aspirations, coming from their deep-sounding rhythms. The hymns that shall endure must be an expression of truth and of faith; and under the new dispensation of grace, this is but to say that they must be Catholic, must express Catholic truth, whether peculiar to the New Law, or descending to it as an heirloom of the Old Law.

The poetry of Christendom is in many respects an expression of its philosophy. What phase of Christian truth or sentiment has not found in it a ready voice and an enduring interpretation? Hell is not too deep, nor Heaven too lofty for its reach; life is not too real, death is not too mysterious for its ken. We can therefore say of the Christian singer what Mr. Leslie Stephen said of Wordsworth's poetry, that it is precious because his philosophy is sound; that his "ethical system is as distinctive and capable of

exposition as Bishop Butler's"; that his poetry is informed by ideas which "fall spontaneously into a scientific system of thought." With regard to Wordsworth's muse, Matthew Arnold's opposite comment may be just: "His poetry is the reality, his philosophy -so far, at least, as it may put on the form and habit of a scientific system of thought, and the more that it puts them on—is the It is not, however, necessary that this living truth should find formal expression in a hymn, but that the spirit of a solid conviction of divine truth pervade it. And just this is the grand, pervading, and prevailing spirit of Catholic hymnody; and herein lies the most distinctive discrimination between it and the hymnody of Protestantism. The same can be said of the Catholic sermon and the Protestant sermon; neither rhetoric nor oratory can kindle the hidden fire—cor ad cor loquitur! The hymn, after all, is a sermon, and like it, can find its way to the heart, and thence to God's throne. Vagueness, sentimentality, and fictitious emotion shall easily take the place of precision of thought, solid devotion, and reasonable piety, when the singer's faith is not clear, systematic, and wholly unquestioning. If philosophy oppose faith, then have the Christian singers of old already realized the "perhaps" of Mr. Arnold: "Perhaps we shall one day learn to make this proposition general, and to say, poetry is the reality, philosophy the illusion."

Again, the Christian singer must be a Poet—not merely an elegant versifier, a master mechanician in

The clock-work tintinnabulum of rhyme.

He must be able to see, as by an abiding instinct, and without conscious effort, the spiritual lesson

Of splendor in the grass, of glory in the flower.

In this sense, many a "mute inglorious Milton" rests beneath the sod he once could read as a book; and many a one whose "tongue is now a stringless instrument" found it in life too ready an instrument for counterfeiting the divine frenzy. And so there are many poets who sing not songs. Indeed, the literature of hagiology might show us many intimate relationships between sanctity and poesy; certainly, St. Francis of Assisi, finding a perpetual delight and inspiration in all of God's creatures, and St. Francis of Sales, reading lessons of sweetest asceticism from every page in the book of nature, were poets as well as saints. It is not necessary that the Christian singer, even in the presentation of the sublimest conceptions, should fill our ears with the organ-storms of a Milton, or

The varying verse, the full resounding line, The long majestic march, and energy divine

of a Dryden. If he be a true poet, like Wordsworth, he will not need such accessories to move the heart. He possesses the secret which can enable him to build a worthy palace of song, not of the "Apocalyptical splendors" of rare marbles and precious stones, but of the common earth which the Lord "hath given to the children of men." This may explain the apparent anomaly in the history of certain hymns, preserved and kept in high honor and perpetual use, though from a literary standpoint falling below the merits of others doomed to an early obscurity. Thus some of the most finished productions of the classical Renaissance belong to the purely historical phase of hymnology. They are found in exhaustive collections, but not in hymnals. Many of exquisite diction have not received even the poor honor of a transla-The hymns for a new Breviary, prepared by Ferreri, received this praise from the cultured Latinist, Marino Becichemi: "That his hymns and odes, beyond all doubt, will secure him immortality, I need not conceal. Certainly I have read nothing in Christian poets sweeter, purer, terser, or brighter, How brief and how copious, each in its place—how polished! Everywhere the stream flows in full channel with that antique Roman mode of speech, except where of full purpose it turns in another direction." But Ferreri's work seems to have passed almost immediately into mere history. On the other hand, the hymns called Ambrosiani, the product of various centuries that witnessed the decline of classic Latin, and even those whose authentic ascription to St. Ambrose gives them a life far extended beyond that of most hymns—these Ambrosiani have survived the obscuring dust of the ages and may claim the immortality predicted for his own work by the greatest of Roman lyrists. Compared with his elegant muse they seem the work of an unskillful tyro, whose wildest dream of fame could not flatter his soul into the triumphant strain:

"Exegi monumentum aere perennius,"

The Christian singers found the divinus afflatus taking shape in their souls, not in the playful fictions of the imagination, but in the devout aspirations of the heart. They went up into the temple to pray. Trench's beautiful reference to St. Ambrose might be applied to many a Christian poet: "It is as though, building an altar to the living God, he would observe the Levitical precept and rear it of unhewn stones upon which no tool had been lifted." Nevertheless, despite the absence of bold figures, vivid word-painting

¹ Duffield's Latin Hymns, p. 319,

and the rest of the poetic paraphernalia, the beatings of the strong heart of the poet are heard, giving its best rhythm to the rude verse. Perhaps this will explain the ill success of most of our modern hymns, Catholic and Protestant. The trappings of "fine-writing" are poor embellishments of prayer. This age has many exquisite versifiers, but few poets.

Since a hymn has for its purpose the elevation of the soul to heavenly things, it is of the nature of a prayer. The true singer should be a Lover of God. The honest piety of the man should shine through his verse. But piety is far removed from sentimentality; it is so earnest in the most practical affair of life, the service of God, that it cannot tolerate any counterfeit; and it is so intensely in earnest that it will frequently show itself in extreme emotion. Sentiment it will admit, but not sentimentality. The Latin hymns are full of the robust, manly vigor of true piety; and, when occasion justifies it, overflowing with tender sentiment. But, while they will not attempt to dress up in human finery the

"Thoughts that do often lie too deep for tears,"

they will admit any expression that ecstatic love may suggest. St. Bernard's Jesu dulcis memoria, St. Francis Xavier's "love-sigh," as the hymn O Deus ego amo te, has been called, are examples of this intense feeling clothing itself in words which do not seem sentimental, however full they are of sentiment. The Church enshrines St. Bernard's hymn in the Office of the Most Holy Name of Jesus. The sweetness of piety is appreciated in every line; and in the two stanzas given here there is no apparent attempt at "fine-writing," no unpleasant suggestion of labored exclamation:

"Jesu dulcis memoria,
Dans vera cordis gaudia:
Sed super mel et omnia
Ejus dulcis praesentia.

"Nil canitur suavius, Nil auditur jucundius; Nil cogitatur dulcius Quam Jesus Dei Filius."

Nor is the sweetness intelligible only as an effect of grace of diction or melody of sound. Caswall's translation into a different English stanza, and into the less musical elements of Anglo-Saxon, melts the heart with a fire hardly less intense:

"Jesu! the very thought of Thee With sweetness fills my breast, But sweeter far thy face to see And in thy presence rest. "Nor voice can sing, nor heart can frame, Nor can the memory find, A sweeter sound than thy blest name, O Saviour of mankind!"

Father Faber's "Jesus, my God and my All," is not a translation, but it will exemplify, although with less force than the cry of St. Bernard, the distinction between emotion and sentimentality. We give below Stanzas I. and IV.:

"O Jesus, Jesus! dearest Lord! Forgive me if I say For very love Thy Sacred Name A thousand times a day.

"The craft of this wise world of ours Poor wisdom seems to me; Ah! dearest Jesus! I have grown Childish with love of Thee!"

In these Latin and English stanzas, that kind of exclamatory style is employed which has been constantly used to counterfeit devotion. But, however nearly the base metal may mimic the gold, it can be detected by its ring—and the poetic ears of St. Bernard and Father Faber were sensitive to true poetry!

The ideal hymn, then, should combine Catholic truth, poetic power, and loving affection. As a body of hymns, the Latin treasures of the Church are pre-eminent for the blending of these three requisites. It is not strange, therefore, to find them exercising such a potent spell over the affections of our separated breth-The zest of antiquarian research may explain much of the critical work of hymnologists, but to another source must be ascribed the endless translations of the hymns into the vernacular, and the introduction of many of them into the hymnals of the various denominations of Protestantism. Most of the translations have, as their originals, the hymns in the grand hymnal of the Roman Breviary. This work, the subject of much revision (some of which has been criticised by hymnologists for ultra-classicism) has proved a casket to countless jewels which, else, might have rested in as great obscurity as Gray's "full many a gem of purest ray serene." The Roman Breviary proved a very accessible storehouse of hymns, and of hymns, too, of exceptional merit. And to this double fact can be ascribed the countless versions made from it into English. But other missals, breviaries, and hymnals than the Roman, have supplied no inconsiderable amount of original matter for translation. It would be an endless task to pursue the history of the hymnody, Catholic and Protestant, of the different nations and epochs. Rather do we hasten

to a brief consideration of the subject of translations into English of hymns and sequences from the Roman Missal and Breviary.

Despite the fact that there are at present in the world some 400. 000 hymns, many of them being original, many of them translations from the Roman Breviary, this endless profusion of choral treasures seems but to awaken a craving for more original work and more versions from the Latin. The hymn finds a partial analogue in the sermon. A comparison between hymnologic and homiletic activity would not, indeed, be a just one in all its phases. For the sermon suffers by age and repetition, but the hymn, if acceptable at first, is apt to improve on familiar acquaintance. But the sermon and the hymn agree in one striking peculiarity—they belong to the most difficult species of composition. The very elements of the former which might seem to predict success are, in truth, prophets of failure. In the hands of a celebrated British statesman they became telling points in his arraignment of preachers for the poor result of all their advantages! But, indeed, the sublimity of the themes, their appeal to the best instincts of the heart. their eternal verity—these may constitute the grandeur of the sermon, but they in no wise lessen its difficulty. To dress big thoughts in small clothes, to make the same stuffs furnish out a wardrobe varying for every festival of the year, to weave the eternal threads into ever-changing patterns of beauty; to be forever the prudent householder, bringing forth at the suitable times "things new and old"; to brush off in a brief moment the dust of worldliness from men's souls; to speak of Heaven in terms of earth, of eternity in terms of time—this is to achieve a notable triumph if done even with mediocre success. Like the sermon, the hymn speaks of Heaven, of Eternity, of stern-faced duty, of siren-tongued pleasure. It is, in its own way, a sermon. like the sermon, it will admit neither of the brilliant argumentation of the cultured logician, nor the dreamy subjectivism of the finefrenzied poet. It must be sublime with the themes of a Milton, but simple with the expression of a Wordsworth. It may not be the pure product of intellect or of heart; but must, with nicest instinct, so justly satisfy the claims of both as to avoid cold speculation on the one hand, and insipid effusiveness on the other. And always the singer must be a Christian, a poet, a lover! Add to all this the fact that the hymn is written with a view to choral treatment, and cannot avail itself at will of the rhythms, cadences, metrical moulds of widely-differing stanzas, which give not only the pleasure of variety, but the force of appropriateness to poetry; and add the other fact, that like the sonnet, it must present a complete thought in a condensed form,—and we have a congeries of difficulties that may easily baffle both industry and genius.

it is worthy of note that the shining lights in the firmament of poetry, the epoch-making names of literature, have not excelled as hymnodists. Some have written sacred poems, but only a few have produced hymns of more than mediocre worth. A glance at our own literature would show this. The opening verses of Cædmon's Song of Creation are hymnodal in character, and are, perhaps, strong in their very rudeness; Chaucer's La Prière de Nostre Dame is also acceptable for its tenderness and, to our eye, quaintness—to quote a stanza which, while one of the most touching, does not display exceptional hymnodal merit:

Gloriouse mayde and moder! which that never Were bitter nor in erthe nor in see,
But ful of swetnesse and of mercye ever,
Help, that my fader be not wrothe with me!
Speke thow, for I ne dar nat him yse;
So have I doon in erthe, allas the while!
That certes, but that thow my socour be,
To synke eterne he wol my goost exile.

Jonson's Hymn to God the Father, is exquisite in its versification; but George Herbert wrote many such; Milton, outside of his metrical rendering of the Psalms, wrote hymns on the Passion, Circumcision, "at a Solemn Music," and an unfinished hymn on the Nativity, priceless as a poem, but in no modern sense a Hymn. Dryden's great Ode on St. Cecilia's Day, although treating of a religious subject, or rather putting a religious finish to a secular theme, is, of course, not a hymn. Pope's tender address of "The Dying Christian to His Soul," is true poetry, but it is rather a sacred poem than a hymn. Walter Scott's Hymn to the Virgin, in the "Lady of the Lake," is really a hymn, but indicates no very special poetic power. Wordsworth's My Heart Leaps Up, partakes somewhat of the nature of a hymn, but its fragmentary form and its purely reflective character stamp it more justly as a sacred meditation. Moore's "Thou Art, O God," is a hymn. His "This world is all a fleeting show" is rather a sacred meditation. Tennyson's prologue to "In Memoriam," has furnished stanzas which, altered in various hymnals, have been sung as hymns by Protestants; but its diction and abstruseness detract from its hymnodal character.

It is not an easy task, then, to write a hymn. And it is not a matter of surprise that there should be so many attempts to satisfy the need, or that the peculiar excellence of Latin hymns should have been recognized in such multitudinous and multiform translations. The history of these versions discloses the remarkable fact that there is a possibility of constantly increasing perfection in translations. And since this is true, it is to be deplored that

Catholics, who should have the best title to such work, have been so remiss in attempting and so careless in performing it. As a rule, the best translations have been made by Protestants, or at least by converts from Protestantism. Out of the long list of names that could be quoted, among the former we may mention the names of Rev. Dr. Neale, General Dix, and Dr. Coles, a physician; amongst the latter, Edward Caswall and Dr. Newman. Although there are many Catholic versions, there is still room for others. Even if these should not excel in merit the work of Protestants, we should at least be spared the humiliating necessity of going to non-Catholic sources for the translations found in our prayer-books and other devotional manuals. In the "Manual of Prayers" published by order of the Third Plenary Council of Baltimore, the version of the Dies Ira-that hymn of endless translation—is a modified form of the version of a Protestant, Dr. Irons. Dr. Irons' first stanza reads:

> Day of Wrath! O Day of mourning! See! once more the cross returning, Heav'n and earth in ashes burning!

It is a translation of the Parisian emendation *Crucis expandens* vexilla. In the "Manual" the third line restores the original *Teste David cum Sybilla*, but at the expense of a questionable rhyming:

Seer and sybil gave the warning.

We have, therefore, a stanza containing not one perfect rhyme. Again, the fifth stanza rhymes "worded" with "awarded." Again, in the Marquis of Bute's Roman Breviary appear many translations by Protestants. He also found it necessary, apparently, to select, with slight alteration, the version printed by Dr. Neale of the Pange Lingua, "which," says the doctor, "claims no other merit than an attempt to unite the best portions of the four best translations with which I am acquainted-Mr. Wackerbarth's, Dr. Pusey's, the Leeds Book and Mr. Caswall's (which last, however, omits the double rhymes)." It seems to us that there should be such a profusion of Catholic translations of Catholic hymns as to create an embarras de richesse, and not what would appear to be an embarrassment of poverty. But the work of translation is not easy; and in view of the fact that many skilled hands have already devoted themselves to this task, and much unselfish energy has been spent upon it, it is clear that the coming translator must be alike of transcendent ability and of unflagging industry. We have altogether too many translations, and altogether too few. The pity is that the work is too often esteemed the passing pleasure

of an idle moment. The sin lies not, indeed, in the harmless amusement of translation, but in the literary crime of publishing the translation. For then the true interests of the hymn are baffled; mistaken judgment is passed either against the hymn, or against all translations. It is surely a mistake to allege against the merits of the hymn, or the possibility of a good version of it into the vernacular, the crude performances of the million. Let the critic, scholar, and poet give his labor and his love to the attempt, and forthwith his translation becomes a thing of life and beauty. We are not arguing against, but contending here for, the principle of an abundance of translations—but better ones!

The history of translation shows how, little by little, the difficulties offered to such attempts by the monumental hymns have been triumphantly combated. The Dies Iræ is an illustration. The earlier attempts at translation appear at the present day exceedingly crude, careless, unsympathetic. Many of them were mere paraphrases; many of them never ventured on a similar metrical and rhymic effect with the original. Perhaps the best illustration, however, will be found in that angelic song of the "Angelic Doctor," the Pange Lingua. Its melody has ravished the souls even of Protestants; its wonderful crystallization of thought has been their theme of praise; its clear, dogmatic utterances, an abomination in their ears. But with many of our separated brethren its beauty has proved too attractive; and so, with mutilated text and "spiritual" sense, it has found its way into their service of song. In the translation of such a masterpiece of melody, poetry, thought and dogma, there should be evidence, not of careless haste, but of the most painstaking accuracy, and the most sympathetic labor. For such a spirit must we give the Anglican, Dr. John Mason Neale, the credit and the sincerest praise. His patient industry and love for his task must seem to us somewhat like an unconscious rebuke to our own listlessness and cui bono temperament. This is the spirit in which he approached the task of furnishing the English repertory with a version of the great hymn: "It has been a bow of Ulysses to translators. The translation above given claims no other merit than an attempt to unite the best portions of the four best translations with which I am acquainted, Mr. Wackerbarth's, Dr. Pusey's, that of the Leeds book, and Mr. Caswall's (which last, however, omits the double rhymes). Chiefly where, as in the first line, and the fourth and fifth verses, all seemed to me to fail, I have ventured another attempt, possibly to display another failure. In the latter, the two concluding lines, Præstet fides supplementum Sensuum defectui, are avoided by all. The versions are: 'Faith, the senses dark refining Mysteries to comprehend; Faith, thine earnest adoration, vol. xvIII.-19

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Passing eye and touch, present.' Mr. Caswall's translation, unshackled by rhyme, is nearest: 'Faith for all defects supplying, where the feeble senses fail.'" He pays special attention to the fourth stanza, which runs in the original thus:

Verbum caro panem verum
Verbo carnem efficit:
Fitque sanguis Christi merum,
Et si sensus deficit,
Ad firmandum cor sincerum
Sola fides sufficit.

"The great crux of the translator is the fourth verse. I give all the translations: 1. 'God the Word by one word maketh Very Bread His Flesh to be: And whoso that Cup partaketh, Tastes the Fount of Calvary: While the carnal mind forsaketh, Faith receives the Mystery.' Here the incarnation of the Word, so necessary to the antithesis, is omitted, and so exact a writer as S. Thomas would never have used the expression by ONE word. 2. 'At the Incarnate Word's high bidding, Very Bread to Flesh doth turn: Wine becometh Christ's Blood-shedding: And, if sense cannot discern, Guileless spirits, never dreading, May from Faith sufficient learn.' Here the antithesis is utterly lost by the substitution of Incarnate for made flesh, and bidding for word, to say nothing of Blood shedding for Blood. 3. 'Word made Flesh! The Bread of nature, Thou by word to Flesh dost turn: Wine, to Blood of our Creator: If no sense the work discern, Yet the true heart proves no traitor: Faith, unaided, all shall learn.' Here the antithesis is preserved, though at the expense of the vocative case. And surely S. Thomas, in an exact dogmatical poem, would not have spoken of the Blood of our Creator. Mr. Caswall, following up the hint given by the last version, and substituting the apposite pronoun for the vocative, has given, as from his freedom of rhyme might be expected, the best version: 'Word made Flesh, the Bread of nature, By a word to Flesh He turns: Wine into His Blood He changes: What though sense no change discerns, Only be the heart in earnest, Faith the lesson quickly learns.' In both these last translations, however, the panem verum of S. Thomas is not given, and Mr. Caswall brings in the worse than unnecessary article—By a word. Since the first edition of my book, 'Hymns, Ancient and Modern' have produced a translation put together from former ones, but nearer my own version than to any other. Their fourth verse is their weakest:

> "" Word made Flesh, True Bread He maketh By His word His Flesh to be: Wine His Blood, which whoso taketh, Must from carnal thoughts be free: Faith alone, though sight forsaketh, Shows true hearts the Mystery."

"It is needless to observe that the italicized line and a half is not in the original. *Forsaketh*, too, is scarcely English. I have substituted an alteration of 'Hymns, Ancient and Modern' for my original fifth verse" (quoted from the third edition of Dr. Neale's "Mediæval Hymns and Sequences," 1867).

We may be pardoned the long extract because of the many lessons it teaches the future translator. It shows, first, the critical and patient industry that will exhaust every expedient to preserve intact the essential meaning of the hymn, the pointedness of its several antitheses, the melody of its versification, and its rhymic, or, rather, assonantal excellence. The more important lesson is, however, the lesson of triumph over the inherent difficulties so critically pointed out. Patience will surely be rewarded with ever-increasing excellence in the translation. The lesson receives even greater accentuation by comparing the later translations with those found in earlier hymn-books and retained even in the latter-day reprints. For sake of emphasis, we place beside each other an early version and that found in the "Manual of Prayers Prepared and Published by order of the Third Plenary Council of Baltimore."

Α

The Word, made flesh for love of man, His word turns bread to flesh again, And wine to blood, unseen by sense, By virtue of Omnipotence; And here the faithful rest secure, Whilst God can vouch and faith insure. R

Word-made-Flesh, true bread He maketh By His word His Flesh to be; Wine His Blood; which whoso taketh Must from carnal thoughts be free; Faith alone, though sight forsaketh, Shows true hearts the Mystery.

Version B has the metre and double-rhyming of the original; version A has neither. The first line of version A has, moreover, the harshness of a grammatical construction, or rather want of construction, which the English grammarians might term absolute. Version B, which is that of the Protestant hymnal, "Hymns Ancient and Modern," has all the defects pointed out by Dr. Neale. It is, nevertheless, a far better translation than A. Dr. Neale's is a better version, but somewhat crude in expression, although not more so than B. Under the heading D we print beside it the latest (and a Catholic) version:

C.

Word made Flesh, by Word He maketh
Very Bread His flesh to be;
Man in wine Christ's Blood partaketh,
And if senses fail to see,
Faith alone the true heart waketh
To behold the Mystery.

D.

Into Flesh the true bread turneth
By His word, the Word made Flesh;
Wine to Blood: while sense discerneth
Naught beyond the sense's mesh,
Faith an awful mystery learneth,
And must teach the soul afresh,

Dr. Neale's version is given in the Marquis of Bute's translation

of the Roman Breviary. But a further critical emendation is made, and with great propriety, the word *generosi* in the verse *Fructus ventris generosi* being translated *noble* and not *generous*, as Neale has it. A foot-note (vol. ii., p. 565) indicates other corrections.

The Pange Lingua in translation would afford yet ampler illustration of our argument if, haply, the further illustration would not grow tedious. Enough has been selected, however, to show that, despite the endless translations of Latin hymns, there is room for a constantly increasing weight of excellence. But the task must be approached with a critical, poetic, and, above all, most patient and painstaking spirit.

A diligent study of the translations of the more difficult Latin hymns would furnish suggestions of great value in the matter of future translations. It would demonstrate the advisability of as close a similarity with the originals in metrical form as possible. For, aside from the beauty and inspiration which linger about the traditional cadences, there is the strong æsthetic power in the mere form to which the survival of a hymn through many ages must attribute some of its success. What was a poetic metrical inspiration to the composer cannot be lightly disregarded by the translator. An attempt should be made, too, to preserve a rhymic similarity with the original. But, then, no excuse is accepted for poor rhyming. If the hymn will not yield to graceful rhyme, better a simple prose translation, which shall at least present the simple grandeur of the thought unadorned with a tawdry and wholly unsuccessful finery. The truth seems to be however, that nearly every difficulty will yield to industrious ability. Even the Dies Ira. whose many translations would serve, apparently, to demonstrate the impossibility of a perfect version, has been treated with constantly increasing perfection of rhyme, rhythm, and literalness. The Dies Ira will stand as a type of the difficulties to be met with in the greatest Latin hymns. The history of its versions might serve, also, as a type of the other translations-The number of really excellent renderings is small. others, many cannot in strictness be styled translations; many employ, instead of the measures of the original, less effective and easier English metres. Others preserve the exact metre at the expense of smoothness. Some writers, desiring to be faithful, have become servile, and have preserved the thought only to present it in an unattractive, if not positively repelling, garb; they weigh the measure down with sesquipedalian words of Latin derivation,—the "ations" and the "essions" et id genus omne of Latin terminations forming a storehouse of rhymes well-nigh exhaustless; they stick not at a rhyme whose strangeness almost startles the reader, and

diverts very thoroughly his attention from the sequence of thought to a bewildered consideration of the meaning first, and then the appositeness of the word; their inversions emulate the intricacies of Teutonic syntax, and shame the straightforward simplicity of the mediæval original; they make harsh consonantal sounds grind against each other until we begin to fear that the verse, which was designed to run smoothly, is on the very verge of dropping a wheel.

The task of illustrating the above remarks with extracts would be nearly as endless as it is easy. This want of success is due in many cases, we think, to an exaggerated ideal of fidelity to the original. That the translation should be faithful goes, of course, without saying. It is, nevertheless, difficult to locate the golden mean that shall not sacrifice fidelity, on the one side, to the arbitrary requirements of poetic form; nor, on the other, win exactness at the expense of beauty. Perhaps, between the extremes of servility and license there will be, on the question of deciding this golden mean, tot sententiae quot capita. We think, however, that where the poem is not an exact dogmatical exposition (as are, in substance, the hymns in "Off. SS. Sacramenti"), but a free and poetical train of thought, and of thought that belongs to the whole Christian world in common (as so many of the hymns are), a larger liberty in translation will be conceded by all, than where the poem is more peculiarly the personal property, so to speak, of the poet. Especially may the Dies Iræ be allowed a large treatment, if the gain in beauty be corresponding. Sublime thoughts are, after all, cheap enough. They come to the Christian readymade. We live in the commonplace of miracles. And it is, therefore, more than likely that Thomas of Celano rejected, after trial, many a more 'sublime' thought, and many a more grandly 'simple' expression of it, simply for the reason that one can't have everything in this world; and that one of the first requirements of a poem is that its harmony be not disturbed by the unwise introduction of a theme (to speak musically), which, however striking and meritorious, interrupts the sequence of melody, or constitutes an unresolved discord. To avoid harshness on the one hand, and to secure beauty on the other, it is therefore allowable, surely, to shear, not flay, the thought of the original occasionally, and, with the greater reason, to vary an unimportant figure of speech. We are not pleading the cause of license; unless, indeed, it be that poetic license which is, as has been prettily said, "a license of power and grace, and not of weakness and deformity."

While the devotional repertory of English-speaking Catholics would receive valuable additions in finely-executed translations of the great hymns of the Church, there would not be wanting to the

patient student and translator of the hymns another motive to spur him on in his self-imposed task. There shall be no lack of personal gain. Nothing can take the place of translation in the acquiring of a familiarity with the finest discriminations of thought and expression. But a higher gain remains. The study of hymnology is in some measure a reverent and sympathetic fellowship with the mighty men of old,—the dearer fellowship, for that their heart of hearts is speaking to us, not in cold terms of thought merely, but in the fiery shafts of spiritual ecstasy. Behind the poem is the man, behind the song is the singer, behind the hymn is the Christian. The history of hymnology is, therefore, a compendium of the devotional history of the Church. From the *Magnificat* of Our Lady, down even to the latest hymns in the Office of her Rosary, the devotion of Christianity has been a history written in song.

The hymns have come to our ears laden with the traditions of the centuries. They have been sanctified by an endless iteration on the lips of the wisest and best and dearest of the children of God. They have been a solace to the Confessor, an inspiration of strength to the Martyr. They are pathetic and holy with the tears and triumphs of the innumerable multitude who in all ages and in all climes "have washed their robes in the Blood of the Lamb." They preach to us with a new emphasis the Catholicity of a Church which exhausts time and space; for their burden of praise shall still be heard when "the former things are passed away."

H. T. HENRY.

ENGLISH LIBERTY FROM THE REFORMATION TO THE TRIUMPH OF THE PRINCE OF ORANGE.

BEFORE entering on the treatment of our subject, it would be well to briefly advert to the fundamental guarantees of liberty, and to the state of society, prior to the passing of the sceptre from the hands of Catholic to the hands of Protestant sovereigns. The Magna Charta, which Hallam calls the keystone of British liberty, was in full force. It had weathered the storm; it had emerged from the clouds radiant and triumphant. It was, in the civil order, what the sun is in the physical. As the planets move in their orbits obedient to the sun, so did the different classes of society move in the paths marked out for them by the Magna Charta. The king and the legislator, the priest and the noble, the artisan and the trader, the farmer and the laborer, lived, moved, and had their being in it. Obedience to it had become normal, and any disturbance in its relations was felt and checked. The legislation of a parliament which spurned the maxim, A Deo rex, a rege lex, as is evidenced by the fact that it claimed and exercised the exclusive right of taxation and of making all laws of what kind soever, was the outgrowth of its principles. The common law, the child of Catholic thought, Catholic learning, and Catholic teaching, had attained a degree of wisdom, beauty, and perfection which made it the equal of any system of jurisprudence hitherto known; and its administration by the courts was honest, fearless, and able. Every safeguard was thrown around the absolute rights of individuals, and many of the subordinate rights to which subsequent ages have laid claim, were enjoyed to an extent which the vanity and bigotry of this day are loath to acknowledge. Liberty had the sanction and security of law, and law was sovereign. Before its majesty the majesty of kings bowed, and under its ægis the lowly felt ennobled. Hallam, in considering the polity of England at the accession of Henry VII., says: "The essential checks upon the royal authority were five in number: 1. The king could levy no sort of new tax upon his people, except by grant of his parliament, consisting as well of bishops and mitred abbots or lords spiritual, and of hereditary peers or temporal lords, who sat and voted promiscuously in the same chamber, as of representatives from the freeholders of each county, and from the burgesses of many towns and less considerable places, forming the lower or commons' house. 2. The previous assent and authority of the

same assembly were necessary for every new law, whether of a general or temporary nature. 3. No man could be committed to prison but by a legal warrant specifying his offence; and by an usage, nearly tantamount to constitutional right, he must be speedily brought to trial by means of regular sessions of jail-delivery. 4. The fact of guilt or innocence, on a criminal charge, was determined in a public court, and in the county where the offence was alleged to have occurred, by a jury of twelve men, from whose unanimous verdict no appeal could be made. Civil rights, so far as they depended on questions of fact, were subject to the same decision. 5. The officers and servants of the crown, violating the personal liberty, or other right of the subject, might be sued in an action for damages, to be assessed by a jury, or, in some cases, were liable to criminal process; nor could they plead any warrant or command in their justification, not even the direct order of the king." Further on, in the same chapter, he asserts that, "there is not a single instance, from the first dawn of our constitutional history, where a proclamation or order of council has dictated any change, however trifling, in the code of private rights, or in the penalties of criminal offences."

The feudal system had gone down never to be revived. Villeinage, its worst feature, was no more. The Church, ever and everywhere, the enemy of slavery, had so battled against it that even bitterly hostile to her as Lord Macaulay was, he says that, "before the Reformation came, she had enfranchised almost all the bondsmen in the kingdom."

The judicial torture, which outraged civilization in later times, was unknown. Religious unity produced peace and happiness. All classes knelt before the same altar, and before that altar the beggar was the peer of the monarch. There, the fatherhood of God and the brotherhood of man was a reality and not a catching phrase of the empty demagogue. Institutions abounded where misery was solaced, and the infirm cared for. There were universities for the opulent, and schools for all classes. The question of labor, which now threatens to convulse the world, was then so adjusted that the sons of toil rejoiced in a comfort which those of this day vainly struggle to obtain.

England's commercial and naval greatness, then as now, was celebrated. Recent discoveries, especially that of printing, were made the vehicles of her renown. Her Cabots, following the track of Columbus, had claimed for her El Dorados in the great West. They made tributary to her a land which in the flight of years was des-

¹ Constitutional History of England, vol. i., pp. 18, 19.

² History of England, vol. i., p. 33.

tined to rescue her liberty from the tyranny that menaced its annihilation in the country of its birth, and to perpetuate it for the oppressed of all nations, with the stars for its shield and for its aspirations.

True, the evils inseparable from human society sometimes threw a dark shadow over this picture. War, and the worst of all wars, a civil war, had deluged the land in fraternal blood, and, at times, paralyzed the course of justice. Inter arma silent leges was no idle maxim, but often a condition in the terrible conflict of the Roses. From out that conflict, however,—a conflict which unhappily prepared the way for a stormy, tyrannical, and bloody era -the English constitution came forth in its purity and integrity, adequate to all the wants of a free monarchy, and bearing in its bosom the seeds of life for the varying conditions of society throughout all time. Such was England's constitution and England when the sceptre passed from Catholic to Protestant hands.

The era of the Reformation opens. The lust of Henry VIII. was the match that ignited this conflagration whose destructive fury spared neither life, liberty, nor property. The Magna Charta and the confirmatory statutes were not worth the paper upon which they were written. The Reformation was a conspiracy against fundamental rights, and was, admittedly, to the body politic what the heart is to the natural body. At the same time that Henry threw off the supremacy of the Pope, he threw off the supremacy of the law, and the Church which he enabled his son and successor to establish "continued to be," says Lord Maçaulay, "for more than a hundred and fifty years the servile handmaid of monarchy, the steady enemy of public liberty. The divine right of kings, and the duty of passively obeying all their commands, were her favorite tenets."1

From Henry's reign, until not a very remote day, the liberties of England as established by Catholics were not, even theoretically, acknowledged by any sovereign except Mary. "It is due, indeed," says Hallam, "to the memory of one who has left so odious a name, to remark that Mary was conscientiously averse to encroach upon what she understood to be the privileges of her people. A wretched book having been written to exalt her prerogative on the ridiculous pretence that, as queen, she was not bound by the laws of former kings, she showed it to Gardiner, and on his expressing indignation at the sophism, threw it herself into the fire." Her charge to Morgan, when she appointed him Chief-Justice of the Court of Common Pleas, leaves no doubt as to her good disposi-

¹ Macaulay's Essays, vol. i., p. 324.

² Constitutional History of England, vol. i., p. 55.

tions—dispositions which her evil circumstances unhappily interfered with. "I charge you, sir," said she, "to maintain the law and justice indifferently, without respect of person, and, nothwithstanding the old error among you which will not admit any witness to speak, or other matter to be heard, in favor of the adversary, the crown being a party, it is my pleasure that whatever can be brought in favor of the subject may be admitted and heard. You are to sit there, not as advocate for me, but as indifferent judge between me and my people."

During the long interval between 1534, when Henry became head of the Church, and 1688, when William of Orange triumphed over James II., England's government was either absolute or anarchical. What a sad and harrowing history do these one hundred and fifty-four years unfold to our view! Who can read it without horror and indignation? While there is much of comedy in it, it is, in the main, a series of tragedies, and the pathetic strains of the *Miscrere*, mingled with the wild wailings of Rachels, pierce the heart through all the shifting scenes.

In vain did the weak and oppressed call for the restoration of the constitution as it existed before the Reformation; their call was met with the cry of treason. Tower, torture, confiscation, banishment, and barbarous execution, still the voice of restoration and reform. Much that is noble in man is made treason, and much that is vile, loyalty. Concessions wrenched are not observed, and when those who wrenched them gain power they, in turn, trample on them. In the struggle for ascendency no obligation is held sacred. Division and dissension are everywhere, and, whoever triumphs, persecution reigns. It is war to the knife between the sects, who never cease their hostility except when the Catholic Church looms into Having driven her into the by-ways and hidingplaces, they resume the work of hate in the name of the God of charity, and thus demonstrate to the world that religion divorced from authority is madness pure and simple. To-day the Episcopalian is in the ascendant, and the Mores and the Fishers suffer for their virtues. To-morrow, the sceptre passes to the Catholic for a short time, the only time during this period of one hundred and fifty-four years, except the time of James II., whose reign, as well as that of Mary, was so hampered by the Reformers that they must take the responsibility of it.

"Bloody" Mary's few years of government have furnished more models of vituperative and pathetic declamation than the ten persecutions. If the tears that were shed over them in Sunday-schools, revivals, and prayer-meetings were collected, we should have an-

¹ Cited in Lingard's History of England, vol. v., p. 261.

other ocean equal to the Atlantic; and if the curses and lies uttered about them were printed, the books that contained them would bridge it. In their presence, a bright halo of sanctity encircles the traditional Jesuit, and a ray of sunshine penetrates the dungeons of the Inquisition. St. Bartholomew's day alone can dispute with them their vicious pre-eminence.

While no apologist for them, we believe that they have done more harm in shutting the eyes of Protestants than in any other regard. Without self-knowledge there can be no reformation. This holds true not only of the individual but of the system. The individual who is wedded to a system should know that system, should look it squarely in the face, and anything that obstructs his view should be thrust aside. These few years have been a stumbling-block to this knowledge, and, hence it is, that multitudes of honest but weak-headed men and women regard their ancestors as solely the victims and not the perpetrators of wrong. "It is a prevalent opinion among us," says Rev. C. S. Henry, D.D., in a note to Guizot's lecture on the Reformation, "that the Romanists are the only ones who put people to death on account of their religious opinions. Protestants should know that this is not the case. So far from it, much sad warrant was given for the taunt of the Papists that the Reformers were only against burning when they were in fear of it themselves."

This blind credulity accounts, in a large measure, for their intolerance and hate despite the advancing spirit of justice and liberality. The cobwebs of prejudice, woven by falsehood, have sealed their eyelids, and instead of deploring the iniquities of their ancestors, they heap curses loud and strong on a reign whose alleged horrors were mild compared with the appalling catalogue which, to the disgrace of human nature, Protestant madness and rapacity have compiled. Cranmer, of whose heroic death we hear so much, was a traitor, a murderer, and a hypocrite, and would not have died at the stake if recantation would have saved his wicked life. So, too, of many others who fared similarly, and who have found a place in Fox's martyrology.

Mary passes away, and with her all hope of civil and religious freedom for the Catholic, until long after the consummation of the glorious Revolution from which ignorance dates the liberties of England. The day of the Episcopalian again dawns; and it is a long, terrible day-a day extending over three reigns, those of Elizabeth, James I., and Charles I.

That Elizabeth should persecute Catholics—that she should employ the rack, the scavenger's daughter, the gauntlets, "littleease," and other diabolical contrivances for their torture and degradation—that she should mutilate, behead, embowel, and burnthat she should stop at nothing, however horrifying, for their apostasy or extirpation—is not at all surprising; but that she should use nearly the same weapons against the co-religionists of those whose ascendency on the continent her soldiers were periling their lives to secure, is a little puzzling to men who regard the Reformation, to use the fine phrase of Guizot, as "an insurrection of the human mind against the absolute power of the spiritual order."

It would appear, however, that the Genevan theology, while all right in France, was not to be tolerated in England; and the Puritans were made to partake of the chalice which they so madly persisted in pressing to the lips of Catholics. ance of liberty which they derided when claimed by their Catholic fellow-countrymen, they now claimed for themselves, but in vain. The charter of John, and the magnificent securities thrown around it by the wisdom of parliaments and of courts, before the mental and moral running a-muck inaugurated by Henry's lechery, were sacrificed to the Moloch of statutory supremacy and infallibility. They had sowed the wind, and they were now compelled to reap the whirlwind. The habeas corpus, which was always a matter of right, was denied them, and they found trial by jury the merest mockery. The Court of Star Chamber, ever hostile to the jury, was in this reign a very bulwark against its freedom. "The control of this arbitrary tribunal," says Hallam, "bound down and rendered impotent all the minor jurisdictions. That primæval institution, those inquests of twelve true men, the unadulterated voice of the people, responsible alone to God and their conscience, which should have been heard in the sanctuaries of justice as fountains springing fresh from the lap of earth, became like waters constrained in their course by art, stagnant and impure." To this despotism courts surrendered their independence, and the ermine of the judge was the badge, not of impartiality, but of rancorous prosecution. The administration of justice had become a farce, and parliament had sunk into deserved contempt for having allowed royal proclamations a footing with statutes. Elizabeth was practically the government, and friend as well as foe stood in terror of her. The following laconic letter, to one of her own bishops who resisted the spoliation of his revenues, will serve to illustrate her conduct towards her friends, and show that their fears were not groundless:

"PROUD PRELATE:

"You know what you were before I made you what you are: if you do not immediately comply with my request, by G——, I will unfrock you.

"ELIZABETH."

¹ Constitutional History of England, vol. i., p. 234.

Had she so desired, it would have been as easy for her to torture and execute him as to unfrock him.

James I., who succeeded Elizabeth, had more hate for Puritans than his predecessor, and less for Catholics, because, as he erroneously conceived, they were less hostile to the doctrine of divine right and passive obedience, but, as he truly conceived, less powerful. If the one placed any reliance on his assertions of devotion to the Scots' kirk, and the other on his promises of toleration, they were both very soon undeceived. To both he was alike faithless, and made them the victims and the sport of a power which he blasphemously ascribed to God. The Court of Star Chamber and royal proclamations were the servitors of his extraordinary claims.

That such a contemptible pedant and coward should have succeeded in governing arbitrarily, is the best evidence which can be adduced against those who wielded the sceptre of supremacy and infallibility before it passed into his hands. Had he less learning, and more common sense, he might have made a respectable figure on the throne in ordinary times; but, in Henry's place he could not stand at all, and in Elizabeth's he would be disposed of in short order. Fortunately for himself, and, perhaps, fortunately for England, he came after these sovereigns of iron, blood and consummate ability. His extravagant claims of power aroused the spirit of inquiry, and his weakness and pusillanimity emboldened the opposition who loudly demanded the freedom which the wisdom and valor of Catholics had made the birthright of all. True, the bold language of courts, and the vigorous protests of parliaments were often followed by cringing cowardice or persecution, but they had called into existence a power which, in the next reign, shattered the throne, and forever laid bare the monstrous sophisms by which it was upheld.

The nation, now disgusted and indignant, determined to demand its ancient rights and privileges, which, since the apostasy of Henry, were disregarded. It had tired of royal arrogance, insolence, usurpation, robbery, and murder. It longed for the reign of law, and its attitude, through its parliament, although at first moderate and even conciliatory, was such as to awaken the fears and the prudence of any monarch except one whose visionary importance had been fed until only the rudest shock could arouse him to a sense of his danger. The resistance of the people to the unconstitutional loan, their shout at Westminster, Middlesex, and Kent: "A parliament! a parliament! else no subsidies!" was met with impressment into the navy of the common people, and the incarceration of the gentry. The imprisonment of Darnel, Corbet, Earl, Heveningham, and Hampden, would be of little moment in the days of Elizabeth, but in the days of Charles I., it was a very

serious matter. Though Charles was successful in the habeas corpus proceedings that grew out of it, the interest those proceedings created, and the thorough and fearless sifting of constitutional principles to which they gave rise, cannot be overrated as a factor in the movement for liberty. The counsel who conducted these proceedings on the part of the defendants were eminently fitted for their work, both on account of their vast attainments as lawyers and their fearlessness in the discharge of duty. Seldon, whose fame as one of the great lights of the profession still lives, and Noy, yet justly renowned despite his apostasy, took leading parts, and poured a wealth of learning and of argument on the question, which, if heeded, would have won for their clients a righteous judgment, for their countrymen a proper recognition of their rights, and for their king a salutary fear of tampering with the liberties of the people, as the common law, the Magna Charta, and the various confirmatory statutes, had defined and established them.

The resolute and patriotic action of the next parliament was largely owing to the ignominious defeat of the habeas corpus proceedings. The Petition of Right might not have come so soon, had the defendants triumphed, but it now became an immediate and crying necessity. It was the first great effort of the nation, since the Reformation, to regain its shattered health, to rise from the bed of sickness and don the robes of convalescence. It was the first radiant beam from out the black and angry clouds that had hidden from view the scene of ancient liberty. It was the first faint gleam of the axe that crimsoned in the blood of Strafford, Laud, and Charles. It was the handwriting on the wall, but alas! unheeded, if read.

How true the saying, Quos Deus vult perdere, prius dementat, the course of Charles amply illustrates. Regardless of the power that compelled his assent to the Petition of Right, scarcely had the echo of that assent died away when he was again himself, the active embodiment of the foolish theories of his poor, pedantic and vanity-ridden father. The proroguing of parliament, caused by its remonstrance against the arbitrary exaction of tonnage and poundage, was followed by the arrest and imprisonment of those brave and true men who had the courage and patriotism to place themselves in the front of the opposition to the king's mad scheme of stifling the voice of the people, and of holding their liberties at will. The habeas corpus, which the Petition of Right was designed to doubly secure, was refused, and they were remanded to await the pleasure of Charles. Eliot died in the tower rather than submit to the degrading conditions imposed by the court for his release.

The judges were now his accomplices in crime, and although

sometimes disposed to assert their independence, they were, in the main, so timid or corrupt that we have no hesitancy in largely ascribing to them the tyranny that prevailed, the blood that afterwards deluged the land, and the sad fate of a monarch who inherited a despotism of which the people had grown weary, and of which they were gradually becoming determined to rid themselves at any cost. These judges, who could, if honest and resolute, have forced him to constitutional methods of government, aided him in every device to raise money by illegitimate means. Statutes and parchments were examined and obsolete practices of extortion revived. The statute de militibus, I Ed. II., was called into requisition, and one hundred thousand pounds were added to the royal exchequer. The forest laws were again put into operation, and fortunes vanished before them as mist before the morning sun. The ingenuity of Noy, now Attorney-General, but formerly the defender of popular rights, successfully evaded the statutes against monopolies, and a company with exclusive privileges of making soap started into existence on condition that it pay ten thousand pounds for its charter, and eight pounds for every ton of soap manufactured. Starch-makers secured similar privileges, and monopoly ruled and ruined in many other departments of industry. The ability and craft that inaugurated the reign of monopoly did not rest here. The busy brain of Noy was intent on formulating a scheme that would enable Charles to govern without parliamentary interference. The project was worthy of his keen intellect and persevering industry. His efforts were crowned with success. From ancient parchments, found in the Tower, he learned that seaports, maritime counties, and occasionally inland places, had been in early days required to furnish ships for the public service. This discovery was turned to account, and there was not wanting plausible warrant in the circumstances of the times for the revival of a practice which the condition of the country in a remote period might have justified. The scheme of Noy was perfected by Sir John Finch, Chief Justice of the Court of Common Pleas, whose zeal in the service of his master compensated for his lack of learning and breadth of comprehension. The new scheme embraced not only the maritime towns and counties but the whole kingdom; and writs were accordingly directed to the sheriffs empowering them to assess every inhabitant subject to assessment, und to enforce payment by distress.

That the scheme worked well, is proved by the fact that the yearly supply therefrom was two hundred and eighteen thousand five hundred pounds; but that it was hazardous, and even dangerous. Charles fully realized, as is evidenced by his efforts to secure the opinions of the judges as to its legality, and the use he made of those opinions when secured.

If, however, he had hoped by this means to silence the voice of popular discontent, he was very soon undeceived. John Hampden, whose name will ever be sacred to freedom, who in 1626 refused to pay his assessment towards the forced loan lest the curse pronounced against the violators of the Magna Charta should fall on him, now came forward to be the victim or the hero of the nation's rights. His ostensible purpose was to test the legality of shipmoney; his real purpose to arouse the people to a sense of their peril, and to nerve them to resistance. The amount of his shipmoney, twenty shillings, was of no importance, but the principle it involved was of vital importance. It was repugnant to the spirit and the letter of the Constitution of his country, which had established that parliamentary consent was necessary to taxation, and he therefore felt that it was his duty, as a law-abiding citizen, to resist by all available just means its enforcement.

In the trial, his counsel, after showing how and in what manner the law had provided for the public safety, after adverting to the clause in the Charter of William the Conqueror that land shall be held free from unjust tallage, and to that of the Magna Charta that no aid or scutage should be assessed but by consent of the Great Council, they produced statute upon statute, passed in the days of the Plantagenets, asserting and enacting the exclusive right of parliament to impose taxes. The Confirmatio Chartarum, 25 E. I. De Tallagio non Concedendo, and laws enacted under Edward III., were relied on. The conduct of the peers, and other great men, when convoked by the Privy Council in the reign of Richard II., at a time when the realm was threatened with invasion, was commented on. The fact disclosed, that though the danger of invasion was imminent, yet this distinguished assembly could do no more than loan its own money, and advise the speedy summoning of parliament, which, it claimed, was alone competent to provide a remedy. It was admitted by counsel for defendant that the voice of law could be silenced byextreme necessity, but it was denied and proven, that there existed any such necessity in the case before the court. Lastly, the Petition of Right was introduced and relied on as an insurmountable barrier to the tax in question.

Against such an array of statutes Noy's dusty explorations in the Tower were powerless. No legal defence of ship-money could be made, and it is but just to add, none was attempted. By the crown counsel and by the judges it was lifted out of the domain of law, out of the constitution, out of the pale of Christianity, and defended on barbaric and pagan principles—principles worthy of the lust that revived them, of the apostasy that propagated them, and that thrived and fattened on them.

To show their nature, we will offer a few passages from a law

dictionary published in the early part of the reign of James I. It was dedicated to Archbishop Bancroft, and was eulogized by the king, although he afterwards thought it expedient to suppress it by proclamation. Whatever its fate, James and Charles followed its teaching, and the judges in the case we are considering gave to it the sanction of their authority by making its doctrines the doctrine of the court. After our quotations from this dictionary, the work of Dr. Cowell, a man of learning and of eminence in the legal profession, we will offer some extracts from the decisions of the judges, so that our readers may see how close the resemblance between the condemned book and the court.

Under the title of "King," the law dictionary said: "He is above the law by his absolute power, and though, for the better and equal course in making laws, he do admit the three estates into council, yet this, in divers learned men's opinions, is not of constraint, but of his own benignity, or by reason of the promise made upon oath at the time of his coronation. And though at his coronation he take an oath not to alter the laws of the land, vet, this oath notwithstanding, he may alter or suspend any particular law that seemeth hurtful to the public estate. Thus much, in short, because I have heard some to be of opinion that the laws are above the king." Under the title of "Parliament," we find: "Of these two one must be true—either that the king is above the parliament, that is, the positive laws of his kingdom, or else that he is not an absolute king. And therefore, though it be a merciful policy, and also a politic mercy, not alterable without great peril, to make laws by the consent of the whole realm, because so no part shall have cause to complain of a partiality, yet simply to bind the prince to or by these laws were repugnant to the nature and constitution of an absolute monarchy." Under the title of "Prerogative" it is asserted, that "the king, by the custom of this kingdom, maketh no laws without the consent of the three estates, though he may quash any law concluded by them;" and that he "holds it incontrovertible that the king of England is an absolute king."1

That there is no difference between the doctrines of Dr. Cowell; which provoked the indignation of the House of Commons in the days of James, and the doctrines advanced by the judges in Hampden's case, the following extracts from their opinions will establish beyond question: "This imposition, without parliament," says Justice Crawley, "appertains to the king originally, and to the successor ipso facto, if he be a sovereign in right of his sovereignty from the crown. You cannot have a king without these royal

Cited in Hallam's Constitutional History of England, vol. i., pp. 320, 321.
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rights; no, not by act of parliament." "Where Mr. Holborne." says Justice Berkley, "supposed a fundamental policy in the creation of the frame of this kingdom, that, in case the monarch of England should be inclined to exact from his subjects at his pleasure, he should be restrained, for that he could have nothing from them but upon a common consent in parliament, he is utterly mistaken herein. The law knows no such king-voking policy. law is itself an old and trusty servant of the king's; it is his instrument or means which he useth to govern his people by: I never read nor heard that lex was rex, but it is common and most true that rex is lex." Justice Vernon's opinion was, "that the king, pro bono publico, may charge his subjects for the safety and defence of the kingdom, notwithstanding any act of parliament, and that a statute derogatory from the prerogative doth not bind the king; and the king may dispense with any law in case of necessity." Justice Finch, who gave a "vicious perfection" to the discoveries of Noy, held that, "no act of parliament could bar a king of his regality, as that no land should hold of him, or bar him of the allegiance of his subjects or the relative on his part, as trust and power to defend his people; therefore, acts of parliament to take away his royal power in the defence of his kingdom are void; they are void, acts of parliament to bind the king not to command the subjects, their persons, and goods, and I say their money, too; for no acts of parliament make any difference." To these opinions, opinions almost without a parallel in the history of judicial prostitution or judicial Dogberryism, we will add a passage from the speech of Attorney-General Banks, as it is a most emphatic declaration of the ideas then proclaimed regarding kingly power: "This power," he says, "is innate in the person of an absolute king, and in the persons of the kings of England. All magistracy it is of nature, and obedience and subjection it is of nature. This power is not anyways derived from the people, but reserved unto the king when positive laws first began. For the king of England, he is an absolute monarch; nothing can be given to an absolute prince but what is inherent in his person. He can do no wrong. He is the sole judge, and we ought not to question him."1

The crown, in spite of all that was so learnedly, eloquently, and moderately urged, obtained judgment, but the court was divided, five out of the twelve judges who composed it dissenting—some on technical grounds, and others against the prerogative without any qualification whatever. The case lasted six months, and during these six months every man's eye was riveted on the Exchequer-Chamber. Though the king carried the court, Hampden accom-

¹ Cited in Hallam's Constitutional History of England, vol. i., pp. 430, 431.

plished his purpose, and from that day forth the patriotic party interposed obstacles to the collection of the infamous tax, as it had now reason to regard it. Archbishop Laud writing to Lord Wentworth, bewails the decision of Justices Cooke and Hutton, who, he savs "had both gone against the king very sourly," and enumerates as its effects the increased boldness of the opposition, the considerable decrease in the returns of ship-money, and the change in the sentiments of those who were previously reconciled to its imposition. "It is notoriously known," says Clarendon, the historian of the period, "that pressure was borne with much more cheerfulness before the judgment for the king than ever it was after."1

Notwithstanding the alarming manifestations of discontent in every county of the kingdom, Charles continued his arbitrary sway both by means of proclamations and iniquitous proceedings in the Star Chamber, means which his predecessors, from Henry down, had so effectively employed against the liberties of the people. For eleven years he resorted to every expedient to govern without a parliament; and when finally compelled by the exigencies of his war with the Scotch Covenanters to summon a parliament, he found it bitterly hostile, and disposed only to consider the foul tyrannies that characterized his rule. This parliament met on the 13th of April, 1640, and was dissolved in May of the same year, leaving Charles in a much sadder plight than before. Clarendon eulogizes the men who composed it, says they were sober, dispassionate, and good willed; but a glance at the names on its roll affords no warrant for his praise. It is asserted that some of its members had entered into negotiations with the Covenanters against the king, and that, as a result, Leslie had assumed the offensive and crossed the Tweed. It is not at all improbable that. had it not been dissolved so speedily, it would have gone to the lengths of the Long Parliament, which soon followed, and which, after many laudable acts, became more regardless of constitutional checks than the monarch whom it condemned, ending by completely trampling on the liberties it professed to save, placing the reins of power in the hands of a man of iron and blood—a fanatical hypocrite, who laughed at ancient guarantees, made a mock of popular assemblies, treated courts with contempt, and acknowledged no law save a will controlled by self.

Cromwell's treatment of that parliament, though without a shadow of legal warrant, and though the one he created to succeed it was a farce and a mockery, is, to our mind, the strongest point that can be urged to save him from a verdict of total de-

¹ Clarendon, p. 122.

pravity. Strange, most strange, that Lord Macaulay should prostitute the treasures of his gorgeous intellect, vast information, brilliant logic, and ravishing wealth of diction, by the defence of this parliament, even after it had unfurled the banner of revolt and given reins to the delirious, blasphemous, and bloody fanaticism of the country. Had he reserved some of the frenzied indignation which he so lavishly heaped on Charles, in his remarkable review of Hallam, for the Long Parliament, afterwards known as the ra pacious and contemptible Rump, his fame as a historian would be enhanced though his vituperative powers of declamation might That parliament was the cause of the civil war, its miseries and horrors, and should be held to a strict accountability by every one who prizes truth. If any defence of Charles could be made, it furnished the best grounds for it. The change of masters was not for the better. The tyranny of one who had some qualities that command respect, was less odious than the tyranny of many who, by their nauseating cant and loud-mouthed hypocrisy made a laughing-stock of themselves and the English people. Judged by that parliament, the English people were not only bloodthirsty bigots but drivelling fanatics, who, in the name of heaven, were prepared to commit any folly, no matter how outrageous or ludicrous. Under it anarchy was supreme, preparing the way for the iron bonds that followed.

After this strange perversion of historical truth—a perversion that the admission of fallibility, made with an air of generous concession, does not redeem—we are not surprised to find the same entrancing writer extol Cromwell as a hero, a lover and benefactor of liberty. "No sovereign," he says, "ever carried to the throne so large portion of the best qualities of the middling orders, so strong a sympathy with the feelings and interests of his people."

If, indeed, it be true that he was the embodiment of the best qualities of the middling orders, and that his sympathy and interest were as described, when the little or Barebones Parliament surrendered to him the power it derived solely from him, he very soon parted with them. But it is not true that he ever had them to carry them anywhere, and of this Lord Macaulay was fully aware. A more glaring and shameless falsehood was never penned—a falsehood that merits for its author the contempt of every man who values historical truth. What Cromwell was before, he was when he usurped supreme power, and what he was when he usurped supreme power he was to the end, namely, an enemy of his country, its laws and institutions, its traditions and religion—a despot, compared with whom Henry, Elizabeth, James, and Charles, shine with a radiance almost celestial.

¹ Macaulay's Essays, vol. i., p. 363.

"A bloody tyrant and a homicide; One raised in blood, and one in blood establish'd."

"No hereditary despot," says Hallam, "proud in the crimes of a hundred ancestors, could more have spurned at every limitation than this soldier of a commonwealth."1

Again,-after telling how Cromwell had divided the kingdom into districts, placing at the head of each a major-general with almost unlimited powers, and with orders to collect a tax, imposed by himself, of ten per cent, from those who had in any way aided the king, and whose estate exceeded £100 per annum—Hallam, in language of truth and beauty says: "All illusion was now gone as to the pretended benefits of the civil war. It had ended in a despotism, compared to which all the illegal practices of former kings, all that had cost Charles his life and crown, appeared as dust in the balance. For what was ship-money, a general burden. by the side of the present decimation of a single class, whose offence had long been expiated by a composition and effaced by an act of indemnity? or, were the excessive punishments of the Star Chamber so odious as the capital executions inflicted without trial by peers, whenever it suited the usurper to erect his high court of justice? A sense of present evils not only excited a burning desire to live again under the ancient monarchy, but obliterated, especially in the new generation that had no distinct remembrance of them, the apprehension of its former abuses."2

Cromwell's death left the nation to be tossed about by every wind of doctrine, against which his feeble son Richard had neither the ability nor the disposition to struggle. All theories of government, and no government, had advocates and adherents. Royalists, fanatics, men of war and blood, planned and plotted. Wallingford House was arrayed against parliament, and, as a consequence. the Long or Rump Parliament was restored, and poor Richard was compelled to give up a position for which he was in every way unfitted.

A bastard republicanism was victorious, but impotent. people, in whose recollection the iniquities of the Rump and the despotism of Cromwell inflicted in the name of republicanism, were still fresh, had no faith in its glittering promises. It was associated in their mind with the betrayal of sacred pledges, and the utter disregard of any and every right that stood in the way of its interest, caprice, or passion. Monk read the signs of the times, and the Restoration soon followed.

Twenty years of war and pillage, of anarchy and despotism, of

¹ Constitutional History of England, vol. ii., p. 22.

² Constitutional History of England, vol. ii., p. 20.

moral and political debasement, of hypocrisy and religious frenzy, had so disheartened and disgusted the nation that it almost unconditionally trusted its fate to Charles. This certainly was an error, for it was in a position to demand of him all the wise securities that it afterwards demanded of William of Orange, and he, undoubtedly, would accede more graciously than did the phlegmatic adventurer of the Hague, whose bigotry and ambition, and not his hatred of arbitrary rule, were the incentives of his invasion.

That there were constitutional barriers to any such demands, we are aware; but, it must be remembered, that this was a time when very little regard was paid to such barriers when they opposed tyranny. Why, then, should they be pleaded now, when by overleaping them the liberties of the people might be secured? True, Charles might not have considered himself bound by any promise made to usurped power; but, would he have dared to violate them? We think not. The legal objections, urged by Hallam against the demand of securities from Charles by the body that constituted a de facto government, were not more grave than those that could be urged against the convention that placed the Dutch bigot on the throne fettered by the Bill of Rights. The nation was back of that convention, and it would have been back of any securities of freedom required of Charles.

However, the Restoration proved a blessing. While it is true, that the ministry of Clarendon ended in his disgrace and exilethat that of the Cabal was profligate—that that of Danby was unscrupulous and bigoted-that that of Russell, Essex, and Shaftesbury, was impotent—the reign of Charles, whatever inconsiderate writers have asserted to the contrary, was favorable to liberty. It was the harbinger of those reforms which the arbitrary government of the Tudors, Stuarts, and Long Parliament, the anarchy of the Rump, the despotism of Cromwell, the anarchy and bastard republicanism of Richard, the revived Rump and the Committee of Safety had rendered necessary. His very vices conduced to this result. Had he not been indolent, and the slave of women, he might have attempted the rôle of his father. As it was, he was satisfied with plenty of money, and the society of his buffoons and mistresses. The smiles and caresses of Nelly Gwyn were more to his liking than schemes of absolutism. His degrading pleasures destroyed his ambition, and it was well for the nation that it was so, and perhaps equally well for himself. In his enfeebled condition of mind and body, he may have exaggerated the dangers attending any notorious departure of his government from constitutional limits, although they were unquestionably formidable thanks to the heroic efforts and sacrifices of the Eliots, the Seldons

and the Hampdens. The days of arbitrary rule had passed, and he had not, we believe, the disposition, conceding to him the ability, to revive them. The Star Chamber and the High Commission courts had ceased to exist, and could not be restored. Trial by jury, the great bulwark of ancient liberty, was less trammeled than at any time since the Reformation, the press was comparatively free, parliament independent, illegal taxation unknown, and the Habeas Corpus Act, to which the unwarranted detentions of Clarendon gave rise, passed into the statute book. There were some instances of illegal proclamations, and many of the denial of undoubted rights, but, on the whole, when we compare this reign to those that preceded it, we cannot but regard it as the convalescing stage in the terrible malady which had so long held the nation in its grasp.

Had James II. been a Protestant in religion and a Catholic in government, the patient would have glided rapidly from convalescence into the full enjoyment of health, purified by the ordeal, and pregnant with the wisdom begotten of suffering. He was, however, a Catholic in religion, whilst his conception of kingly power was derived, not from Bellarmine and Suarez, but from Parker and Laud.

If faithful to the promises made on his accession, his rule might have been prolonged; but they were hardly made when violated. Emboldened by the success of his proclamation levying duties on merchandise, and infatuated by hypocritical speeches of devotion, he entered on a course which would prove his ruin even were he of the national creed. Whatever were his ideas of royal power and we have reason to say that they were nearly as outrageous as those of his grandfather—the great stumbling-block to his rule was his religion. As a Catholic, he could not continue long on the throne of England. His attempt at religious toleration aroused the bigotry of the country, and the birth of the Prince of Wales precipitated a fall which, in any event, was inevitable.

After three inglorious years, it ingloriously came; and the dragon's teeth, sown in the days of Henry, Edward and Elizabeth, were loosened. Liberty emerged from the clouds, not, indeed, in her pristine beauty, yet radiant with promise, glorified by suffering. the laurels of triumph on her brow, her eyes sparkling with hope and her breast heaving with generous emotions, though the viper of religious intolerance still warmed within its folds. The Revolution was consummated, and the spirit of Langton and Pembroke rejoiced with that of Eliot and Hampden. The maxim, A Deo rex, a rege lex, was forever laid at rest, and many of the good old principles which, springing from the bosom of the Catholic Church found sanctuary in the bosom of the society of Anglo-Saxon and Plantagenet times, were again revived—revived never more to be extinguished—revived to purify, to bless, to go on conquering and to conquer.

The Petition of Right, the early statutes of the Long Parliament, the Habeas Corpus, the Bill of Rights, complements to the ancient freedom which the early monarchs of the Reformation had destroyed, were henceforth to be barriers against the evil precedents so often, and most effectually, pleaded in opposition to the Constitution as established by Catholics.

The practices against which this wise legislation was levelled the doctrines that it was to supplant—were peculiar to the Reformation, the very warp and woof of its composition, and had that event never happened, there would have been little need of it. Throughout all the long and terrible struggle which the claims and practices of the Reformation occasioned—claims and practices admitted by the most virulent enemies of the Catholic Churchthe patriots, or perhaps to speak more accurately, the oppressed, insisted on the sufficiency of the laws of the realm as they existed before Henry's Bluebeardism developed. It was in their name the new forms of securities were demanded, the banner of revolt flung to the breeze, and William and Mary enthroned. From the reign of James I., when the struggle against absolute power in the temporal and spiritual order began to assume formidable proportions, they were as the pillar of fire to the Israelites in the desert. Whig and Tory, in the Convention of 1689, were agreed on their sufficiency. The Revolution may, therefore, be considered the restoration of ancient liberty, which was, as it were, held in abeyance during the long period of one hundred and fifty-four years.

That Catholics should be excluded from its benefits is a sad commentary on the spirit engendered by the Reformation—a spirit which even the demands of gratitude were powerless to check. With Protestant ascendency assured, it would have been the part of enlightened statesmanship to unshackle the limbs of those whose ancestors in the faith preserved the realm from the convulsions that afterwards shook some of the nations of Europe, made them the sport of every mad theory, the victims of every successful demagogue, because they had had no social state to serve as a beacon in the wild tempest of human passion.

But, in presence of its actual and prospective benefits—in presence of a past over which it was victorious, and of a future which it blessed, we do not find it congenial to question the legitimacy of its means, or to indulge in the language of crimination. That it partially triumphed over the Reformation, over its two distinctive doctrines—absolute power in the temporal and the spiritual order—and thus enabled the great mass of the people to live in compara-

tive peace and freedom, is, to our mind, sufficient to warrant the verdict, "Glorious," which Protestants have rendered—a verdict which we will not disturb by any complaints, however just. Glorious! though unworthy of the grand old pageantry with which it was crowned; glorious, though untrue to the grand old principles it revived; and glorious, though hostile to the grand old Church from which those principles sprung.

MICHAEL HENNESSEY.

THE LATELY RECOVERED APOCRYPHAL GOSPEL ACCORDING TO PETER.

DURING the winter 1886–1887 was found in a tomb at Akhmim, the ancient Panopolis, in Upper Egypt, a vellum MS. of thirty-three leaves, about six inches by four and three-quarters in size. This find was not communicated to the public till M. U. Bouriant edited the MS., in vol. i. fasc. ix. of the "Memoirs of the French Archæological Mission," a scientific institution which the French government keeps in Egypt. The vellum, now in the Ghizeh Museum at Cairo, dates, according to all appearances, from the ninth century of our era. It contains three books in a fragmentary state, the Book of Enoch in Greek (a most important acquisition, since till now we have known this Book only in its Ethiopic translation), the Gospel according to Peter, and an Apocalypse, identified for the present with the Apocalypse of Peter.

The speed with which the Gospel and the Apocalypse were republished as soon as they reached Europe, forms an amusing contrast with the previous seeming neglect of them. In the "Transactions of the Royal Prussian Academy of Sciences," Prof. Harnack edited both with Introductions. On the very day on which the "Memoirs" reached Cambridge, the text of the Gospel fragment was reprinted at the University Press under the editorship of Rev. H. B. Swete; three days later, on November 20th, a lecture upon the Gospel was delivered in the Hall of Christ's College, by Mr. J. A. Robinson. About the same time, Mr. Montague Rhodes James, fellow of King's College, lectured on the Apoca-

¹ Berlin, November 3, 1892.

lypse. Both of these lectures have been published by C. J. Clay and Sons, in a little volume containing also the text of both documents. The Athenaum for December 17, 1892, and the Boston Commonwealth for December 31st have issued interesting articles on the same subject, written by F. P. Badham and Prof. J. Henry Thayer, D.D.; Mr J. Rendel Harris, now of Cambridge, England, has published a little volume entitled "The Newly Recovered Gospel of St. Peter," issued in New York by James Pott & Co.; J. O. F. Murray, in the Expositor for January, 1803, calls attention to the use of the newly recovered Gospel by Origen. Prof. Harnack has edited both Gospel and Apocalypse in Gebhardt and Harnack's "Texte und Untersuchungen," vol. ix., Heft ii.; Dr. Isaac H. Hall has a very instructive article on the Gospel in the Biblical World for February, 1893. The same writer has published an introduction to and a translation of the Apocalypse in the New York Independent for December, 1892. A very comprehensive article on the Gospel and a notice of the Apocalypse. both by Dr. Gasquet, appeared in the London Tablet for February 4, 1893, and a rather controversial notice against St. Justin's use of Pseudo-Peter by Father Herbert Lucas, S.J., may be seen in the Tablet of February 11th. By far the most thorough investigation on the Gospel of Peter has been written by Father Lucas and published in the Month of January, 1893. Expressing our obligations to the above writers, we think the time has come when the results of their investigations should be laid before the public.

We shall limit our remarks to the following points which are of the highest importance in the study of Peter's Gospel: 1. How can the newly discovered fragment be identified with the Apocryphal Gospel of Peter? 2. What is the age of the newly recovered Gospel according to Peter? 3. What practical bearing has the Gospel on the controversy concerning the authenticity of our Four Gospels?

I. What reason have we'for identifying the recently discovered Apocryphal Gospel with that of Peter? The first ground for their identity is drawn from internal evidence. The Gospel is written in the first person, and pretends to be the account of an eye-witness. Again, the tone of the narrative demands that an important person, closely conected with Jesus, be the fictitious author. How else could we explain the words, "But I with my companions was grieved, and wounded in our understanding we hid ourselves; for we were sought for by them as malefactors, and as wishing to burn the Temple." Finally, the author openly calls himself Simon Peter. "But we, the twelve disciples of the Lord, wept and grieved, and each one grieving at what had happened, departed to his house. But I, Simon Peter, and Andrew my brother took

our nets and went away to the sea; and there was with us Levi the son of Alpheus whom the Lord. . . . " This is the end of the Gospel fragment. The author of the Gospel, therefore, wishes his production to be considered as the writing of St. Peter; in other words, the Gospel is an apocryphal Gospel of St. Peter.

These intrinsic arguments for the identity of the newly recovered Gospel and the apocryphal Gospel of Peter, are confirmed by a number of other considerations. The ancient references to the Gospel of Peter are very few in number. The book is mentioned by Origen,1 Eusebius,2 Jerome,3 Theodoret,4 and Serapion.5

But we do not learn much from these testimonies concerning the real character of the apocryphal Gospel. 1. Origen refers to it for the opinion that the brothers of Jesus were Joseph's sons by a first marriage. Since the recovered fragment of the Gospel begins only within the history of the Passion, we cannot verify Origen's reference. 2. Theodoret mentions the Gospel as being in use among the Nazarenes, "who honor Christ as a just man, and have made use of the so-called Gospel of St. Peter." Whatever may have been the body of the Nazarenes' religious tenets, it is not probable that they used Peter's Gospel as a sacred book. For we shall see that Pseudo-Peter is entirely anti-Judaic, while the Nazarenes were a Judaizing sect. Father Lucas is of opinion that Theodoret may have been in error here, as he is in other points concerning the apocryphal books. 3. Eusebius says that the Gospel of Peter was not used by Catholics, and 4. St Jerome places it among the apocryphal writings. Thus far, then, the testimonies are so vague that they leave us almost entirely ignorant of the doctrinal character of Peter's Gospel, except in so far as they point out its non-Catholic, and probably its heretical tendency.

More light will be thrown on our investigation by the letter which Serapion, bishop of Antioch (A.D. 190-203), wrote to the Church of Rhossus in Cilicia. "We receive both Peter and the other Apostles of Christ; but as experienced men, we reject the writing falsely inscribed with their names, since we know that we did not receive such from our fathers. Still, I allowed the book to be used, for when I visited you I supposed that all were attached to the right faith; and as I had not thoroughly examined the Gospel which they brought forward under the name of Peter, I said: If this is the only thing which seems to create petty jealousies among you, let it be read. But now, since I have learned from what has been told me that their mind was covertly attached to some heresy, I shall be anxious to come to you again;

¹ Commentar, in Matt. x. 17. 3 De Viris Illustr, i. ² H. E., iii., 3; iii. 25.

⁴ Haer. Fab., ii. 2. ⁵ Cf. Westcott, Hist. Can. N. T., pp. 390, 391.

so brethren, expect me quickly. But we brethren, having comprehended the nature of the heresy which Marcianus held—how he contradicted himself from failing to understand what he said, you will learn from what has been written to you—were able to examine the book thoroughly having borrowed it from others who commonly use the very Gospel, that is from the successors of those who first sanctioned it, whom we call 'Docetæ' (for most of Marcianus's opinions belong to their teaching), and to find that the greater part of its contents agrees with the right doctrine of the Saviour, though some new injunctions are added in it which we have subjoined for your benefit."

The apocryphal Gospel of Peter, therefore, contained the heretical doctrine of the "Docetæ." Now, the lately recovered text. too, contains doctrines of a similar nature. We read, e.g., "but he himself was silent, as having no pain," which fully agrees with the doctrine of the "Docetæ," that Christ did not suffer in the flesh. Then, again, instead of the words "My God, my God, why hast thou abandoned me?" the apocryphal Gospel reads: "My Power, my Power, thou hast forsaken me! (or hast thou forsaken me?) and thus saying, he himself also was taken up." This sentence is wholly "Docetic" in its bearing; it supposes that Jesus, either at the time of his baptism, or at any other period of his life, received a Divine Power, constituting him the Christ; this Power leaves the human Jesus during the passion and is taken up into heaven whence it had descended. Having recovered only the latter part of the Gospel, we cannot tell its exact tenets about Christ's birth and infancy, and least of all about the reality of the incarnation. But it is a most remarkable fact that the fragment avoids in the history of the passion all expressions which would imply any real pain on the part of Jesus Christ. The identity of the newly recovered apocryphal Gospel with Peter's Gospel rests therefore on solid arguments.

II. Our second question is concerned with the age of Peter's apocryphal Gospel. We must first distinguish between the age of the recently discovered vellum and the age of the Gospel written on it. The MS. has thus far been generally received as more recent than the 8th, but as older than the 12th century. For our present purpose the exact age of the vellum on which the fragment is written, and of the writing itself, is of little importance, while the age of the Gospel is of the greatest interest. The latter may be approximately settled from data furnished either by the text of the fragment or from extrinsic sources.

It is true that there are a few words and expressions in the Gospel which appear to require a date quite remote from Apostolic times. The Greek words σταυρίσκειν (the usual form is σταυρόω),

άπανιώντες, σκελοκοπηθή, λαχμόν, and the phrase "Lord's Day" in the sense of "Sunday" point to an age later than that of the canonical Gospels. But, fortunately, the testimony of Serapion who wrote between 190 and 203 A.D., furnishes us a terminus after which Pseudo-Peter cannot have written. The same letter of Serapion shows that the holy bishop allowed Peter's Gospel to be read because, not being aware of the heresies it contained, he wished to avoid thereby the petty jealousies among his diocesans in Rhossus. It follows from this, that the Gospel's origin must antedate 100 A.D. considerably. If this were not the case, a learned bishop could hardly have allowed the Gospel to pass unchallenged in his diocese under the name of Peter.

Another fact from which the age of the Gospel may be inferred is the particular form of "Docetic" doctrine it contains. The first signs of this heresy we find in the writings of St. John: i. John, i., 1-3; iv., 1-3; ii. John, vii. After the Apostle's time, the controversy against the "Docetæ" was taken up by St. Ignatius and St. Polycarp.1 The heresy was, therefore, from the first ages of the Church, important enough to call for a refutation from the pen of the most competent Christian controversialists. But the tenets of the sect, if sect it may be called-the "Docetæ" never constituted a separate sect, but were always united with other heretical bodies -were not always the same.

The "Docetic" doctrine, as such, has its root in the Gnostic theory, which regards matter as the seat of evil, so that an incarnation of the Son of God, in the proper sense of the word, is simply impossible. Hence, St. John had to insist on the reality of the incarnation; he assures his readers that he declares only what he has seen with his eyes, what he has heard, and what his hands have handled. There can be no question of a mere phantom underlying all this. Again, the Apostle insists on the fact that "every spirit which confesseth that Jesus Christ is come in the flesh, is of God," while "every spirit that dissolveth Jesus is not of God." The apostle evidently argues against a double array of adversaries: according to the former, Jesus has not come in the flesh; according to the latter, Jesus must be divided into a material body and a higher power which inhabits, as it were, the lower body and constitutes it the Christ.

The history of heresies in Apostolic times confirms our interpretation of St. John's words. Simon Magus represents the first class of the "Docetæ," maintaining as he does, that he himself is the Christ who has appeared as man among men, and has only apparently suffered on the cross.2 Cerinthus represents the second

¹ Ign., ad Ephes., vii. 18.; ad Trall., 9-11; ad Smyrn., 1-7; Polyc. ad Philipp., ² Iren., Haer. i., xxiii. 2. c. 7.

class of "Docetæ," for, according to him, Jesus was the son of Joseph and Mary, while the Christ descended on Jesus after his baptism, in the form of a dove, and departed from Jesus at a later period. Jesus alone suffered and died, while the Christ remained impassible and spiritual.¹

After the time of the Apostles, the principal representatives of the "Docetæ" are Saturninus (or Saturnilus), Cerdo, Marcion, Apelles, and Valentinus, all of whom advocate a modified form of Simon Magus's theory. According to Saturninus, the Redeemer has not been really born, is without body and form, and has only the appearance of a man.² Cerdo's doctrine resembles the system of Saturninus, while Marcion maintains that in the fifteenth year of Tiberius, the Son of God suddenly appeared at Capharnaum in a "corpulentia putativa," without having passed through the body of the Blessed Virgin. Apelles ascribes to Jesus a sidereal body instead of a merely phenomenal one; in this body he enters the world without being really born.³ Valentinus differs from his predecessor by assigning to Jesus a spiritual body, which he brings with him from heaven, and with which he passes through the Blessed Virgin, as water runs through a channel. The Valentinians split afterwards into two parties—the eastern branch, represented by Axionicus and Bardesanes, adhered to the "Docetic" theory of Valentinus, while the western division, under the leadership of Heracleon, Ptolemæus, and Marcus, passed over to the view which St. John branded as "dividing Christ." Jesus Christ, they said, was composed of four elements,—a purely spiritual element which he had received from Achamoth; a delicately organized psychical body, by means of which he became visible and perceptible to the senses without sharing in any way the grosser matter; the divine Soter or Redeemer was united to this Jesus Christ; and fourthly, before this union could be effected, the proper disposition had to be made in Christ's body.6 Evidently, then, we have here a return to the view of Cerinthus, which divides Christ. The only doubt that might arise, concerns the fact whether those who adhered to this opinion were, at that late date, called "Docetæ"; but this, too, is certain from the writings of Tertullian.7

From Cerinthus down to the western branch of the Valentinians there is no vestige of a "Docetic" doctrine which divides Christ. Hippolytus, indeed, represents Basilides as holding a

¹ Iren., Haer., i. xxvi. 1; cf. Epiphan., Haer., xxiii. 1.

² Iren., Haer., i. xxiv. 2.

³ Tertuli, adv. Marcion, i 19; iii. 11; De Carne Christi., 6.

⁶ Epiphan., Haer., xxxi. 7.
⁶ Iren., Haer., i., vii. 2.
⁷ De Carne Christi, 15, 16.

⁸ Philos., vii. 14 ff.; cf. viii., 3; x. 12.

theory similar to the Cerinthian; but, on examination, we find that Basilides himself does not admit a proper indwelling of the divine element, and Irenæus testifies1 that, according to Basilides, the divine vois assumed only an apparent body, which he exchanged for the appearance of Simon of Cyrene before the crucifixion. According to Theodoretus, Tatian, too, was tainted with the heresy of the "Docetæ," but we are not told anything about the particular form under which he defended the doctrine. Clement of Alexandria³ speaks of a Julius Cassianus as the author of the St. Jerome⁴ mentions a Cassianus, who taught the presence of a merely putative flesh in the person of Christ, and Theodoret mentions a certain Kossianus among the disciples of Valentinus. But this Kossianus is either identical with the above Cassianus, or he did not live before 100 A.D., so that our present investigation is not affected by his "Docetic" teaching. Eusebius,6 too, mentions "Docetæ," saying that they use the Gospel of Peter; they are, therefore, identical with the particular class which we are searching for. The "Docetæ" mentioned in the "Philosophumena" hold the "Docetic" doctrine only in a modified form, so that their "Docetism" begins with the Resurrection only.

From all this it follows, that that the doctrine of the "Docetæ" explains the philosophical difficulty involved, according to their idea, in the incarnation of the Word in either of two ways-either the body of Jesus is a real body, and its union with the divine element is only apparent, as the union of an angel with its assumed body; or else, the union is real, and the body is only an apparent one, being either a mere phantom, or a body taken from the stars, or finally, a body brought down from heaven. Both of these explanations existed at the time of St. John; after his time, there is no trace of the former theory which admits the reality of Christ's body but denies the reality of its union with the Word, till we come to the development of the western Valentinians about the middle of the second century. On the other hand, it appears from the newly recovered fragment of Peter's Gospel, that Pseudo-Peter adhered to this explanation. How else are we to explain the cry of the crucified Jesus, "My Power, my Power! thou hast forsaken me! [or, hast thou forsaken me?]." The divine element which had assumed the human, was at that time evidently taken up into heaven whence it had descended.

A word must be said about certain considerations which appear to demand for Pseudo-Peter an earlier date than the middle of the

¹ Haer., xxiv., 3-7.

³ Strom., vii. 17, 108; iii. 13, 91.

⁵ Haer., fab. i. 8. 6 H. E., vi. 12.

² Haer., fab. i. 20.

⁴ In ep. ad Gal., vi. 8.

⁷ Viii. 2, 3, 8-12; x. 12, 16.

second century. 1. A modified form of the fragment's "Docetic" doctrine was taught by Basilides about 125 A.D. 2. F. P. Badham, in the Athenœum, of December 17th, maintains that the author of the apocryphal Vision of Isaias has made use of Peter's Gospel; now, Isaias's Vision is, by Dillmann and Dean, assigned to about 110 A.D. 3. Harnack, with a number of other critics, with whom Dr. J. R. Gasquet seems to agree, maintains that St. Justin made use of the Gospel as one of the sources of the "Life of Our Lord," and that Pseudo-Peter must therefore be placed before 120 A.D. 4. According to J. R. Harris, Peter's Gospel shows traces of following the harmony of Tatian.

To begin with Mr. Harris's opinion, we are sorry to say that his proof is by no means satisfactory. His method consists in comparing Peter's Gospel, not with Tatian, but with other writings—the doctrines of Addai, the Syriac Gospel of Cureton, Ephrem's Commentary on Tatian's text—which he supposes to be a reproduction of Tatian's "Harmony." Besides this, Father Herbert Lucas³ has shown, that in every single point in which Peter differs from our Gospels he differs also from Tatian. Finally, if Peter has used Tatian, he must have written after Tatian, and therefore about the middle of the second century.

To pass to another exception, no proof has as yet been given necessitating a dependence of Isaias's Vision on Peter's Gospel. If, however, such a dependence should ever be proved to exist, it surely would be the most welcome news which orthodox Bible students have received for years. For in that case, they would possess in Peter's Gospel a document reaching almost up to Apostolic times for the authenticity of the Four Gospels.

Against St. Justin's use of Pseudo-Peter Father Lucas has put a very clear and strong argument, fully utilizing the knowledge which we thus far possess of the apocryphal Gospel. The argument contrasts the known discrepancies with the similarities existing between the Gospel and St. Justin:

I. DISCREPANCIES:

- 1. Peter contradicts Justin and our Gospels three times (and once doubtfully).
- 2. Peter omits facts related by Justin and our Gospels three times (and once doubt-our Gospels, once, fully).
- 3. Justin stands alone, his divergence from the Gospels being slight, once.

II. POINTS OF CONTACT:

- t. Peter agrees with Justin and our Gospels, twice.
- 2. Justin agrees with Peter as against our Gospels, once.

Summing up the result, we obtain three points of contact against

⁸ Month of January, 1893, p. 13. 4 London Tablet, February 11, 1893, p. 216.

eight (and two doubtful) discrepancies between Justin and Peter. Two of these points of contact are readily explained, since in them both Peter and Justin agree with our Gospels; the third instance in which Peter and Justin agree as against the Gospels is more satisfactorily accounted for by the assumption that both followed a common third source, distinct from the Gospels (the Acta Pilati, for instance), than that Justin followed Peter here, though he differs from him in eight (and in two doubtful) cases. Dr. Gasquet's answer 1 is, on the whole, a mere repetition of his previous statement. Of the four agreements between Peter and Justin, mentioned by Dr. Gasquet, three are readily explained by a recourse to our Four Gospels, and the fourth is the passage in which both Peter and Justin have probably used the Acta Pilati.

The exception that Basilides's doctrine nearly agrees with the form of "Docetism" implied in Peter's Gospel, has been implicitly answered when we showed that the Philosophumena do not clearly state this fact. It must also be remembered that other conditions involved in the history of Peter's Gospel do not permit us to place its composition in the time of Basilides.

- a. Serapion professes to have borrowed the Gospel from the successors of those who introduced it into the Church. But this he could not have done, had it been introduced by Basilides, who lived almost seventy years before Serapion.
- b. Very little is known of Basilides and his history. It seems that he was an Alexandrian, and probably of Jewish descent. He is said to have lived "not long after the times of the Apostles" and to have been a younger contemporary of Cerinthus, and a follower of Menander, who was himself the successor of Simon Magus.² It is certain from all these details that at Basilides's time the "Docetæ" belonged still to the Judaizing party in the Church. A glance at Peter's Gospel suffices to convince us that it has not been written by a Judaizing author, nor for a Judaizing circle of readers. According to the Gospel the Jews are the principal authors of the crucifixion. None of the Jews are able to wash their hands, though they desire to follow Pilate's example. Herod orders our Lord's execution, and on him devolves the responsibility for Christ's death. Joseph of Arimathea begs the body of Jesus from Pilate who is fully willing to give it, but must beg it, in his turn, from Herod; Herod is throughout represented as Pilate's superior. One of the crucified thieves reproaches the Jews for their treatment of Jesus, and the Jews barbarously desire, on their part, that his legs may not be broken, so that he may die in greater agony. All these considerations are so many proofs for the anti-Judaizing tendency of Pseudo-Peter.

¹ Tablet, February 18, 1893, p. 255.

² Westcott, Can. N. T., p. 293.

- c. Again, Serapion says that Peter's Gospel contains the heresy which Marcianus held. Marcion cannot be meant by this Marcianus, since he did not hold the form of "Docetism" which is contained in Peter's Gospel. All probability points to Marcus as being the Marcianus mentioned by Serapion. For of Marcus, Irenaeus writes: "The Marcosians introduce with subtlety an unspeakable multitude of apocryphal and spurious writings which they themselves forged to confound the foolish, and those who know not the Scriptures of truth." Adding to this that Marcus agrees in his "Docetic" doctrine with Peter's Gospel, we are warranted in maintaining that the Marcosians were the authors of Peter's Gospel.
- d. This inference is rendered still more probable by the fact that Marcus is said to have been of Syrian birth, because he used in his writings Aramaic liturgical forms.² For the apocryphal Peter too uses Aramaic liturgical forms, as is readily perceived on a careful perusal of the Gospel. "Then the Jews," the Gospel reads, " and the elders and the priests, when they saw what an evil deed they had done to themselves, began to beat their breasts and to say. Woe to our sins, for the judgment and the end of Jerusalem is at hand." In our Four Gospels we seek in vain for these words. but they are almost verbatim contained in Syrian sources. doctrine of Addai reads: "Unless those who crucified him had known that he was the son of God, they would not have had to proclaim the desolation of their city, nor would they have brought down woe upon themselves." The Cureton Syriac reads: "And all those who were assembled there, and saw that which was done, were smiting upon their breast and saying, Woe to us, what is this! Woe to us for our sins!"3 It may be of interest to know that the old Latin Codex of St. Germain which contains a very early text of Matthew's Gospel, had a similar reading: "Woe unto us, the things which are done to-day are done for our sins; for the desolation of Jerusalem hath drawn nigh" [Vae nobis, quae facta sunt hodie propter peccata nostra; propinquavit enim desolatio Hierusalem].

Another instance of Peter's approach to the Syrian liturgy we find in his story of the Resurrection: "They see go out from the sepulchre three men, and the two holding upright the one, and a cross following them. . . . And they heard a voice out of the heavens, saying, 'didst thou preach obedience to them that are asleep?' And an answer was heard from the cross, 'Yea.'" The cross following the three coming out of the sepulchre reminds one of the passage in the Syriac-Antiochene liturgy for the feast of the Holy Cross:

¹ Haer., i. xx. 21.

² Iren, *Haer.*, i. xxi. 3.

⁸ Luk. xxiii. 47.

"Thou didst ride the cross when thou wentest forth to bruise the armies of the powers."

As it is therefore certain, on the one hand, that Peter's Gospel was not written after 100 A.D., so it is most probable, on the other hand, that it was written by Marcus or his followers about the middle of the second century.

III. The third question which we wish to touch upon, is concerned with the practical bearing of Peter's Gospel on Christian Apologetics. The first fact, of the greatest importance in this respect, consists in Pseudo-Peter's use of the Four Gospels. John, xix. 2, 13, 16, 24, 31, 41; xx. 5, 10; xxi. 3; Luke, xxiii. 7, 32, 39, 44, 45, 47, 50, 54; xxiv. 1, 4; Mark, ii. 14; xv. 19, 32, 33, 38, 39, 42, 45, 46; xvi. 1, 3, 4, 5, 6, 8; Matt., xxvii. 24, 30, 44, 45, 51, 54, 57, 60, 64, 66; xxviii. 1, 5, 6, 8, will be recognized without much difficulty in the text of the Gospel.

".... But no one of the Jews washed his hands, neither did Herod, nor any one of his judges, nor even of those who wished to wash them. Pilate rose up, and thereupon Herod, the king, orders that the Lord should be taken away, saying to them: What I have commanded you to do, do ye with him.

"And Joseph, the friend of Pilate and of the Lord, had come thither, and knowing that they were about to crucify him, he came to Pilate and begged the body of the Lord for burial. And Pilate sent to Herod and asked for his body. And Herod said: Brother Pilate, even if no one had asked for him, we should have buried him, since the Sabbath is drawing nigh. For it is written in the Law that the sun must not go down upon one that has been murdered, on the day before their feast, the feast of the unleavened bread.

"But they, having taken the Lord, pushed him as they ran, and said: Let us drag away the son of God, since we have him in our power. And they clothed him with purple, and seated him upon the judgment-seat, saying: O, king of Israel, judge righteously. And one of them brought a crown of thorns and set it upon the Lord's head.

"And others standing by, spat in his face (eyes?), and others struck his cheeks; others pricked him with a reed, and some scourged him, saying: Let us honor with such honor the son of God.

"And they brought two evil-doers, and crucified the Lord between them. But he himself was silent as having no pain. And when they set up the cross, they wrote upon it: This is the king of Israel. And having laid down his garments before him, they divided them, and cast lots for them.

"And one of those malefactors upbraided them, saying: We

have suffered thus by reason of the evil deeds which we did, but this one, having come as Saviour of men, wherein has he offended? And incensed against him, they commanded that his legs should not be broken, in order that he might die in torment.

"And it was mid-day, and darkness covered all Judea; and they were disturbed and in trouble lest the sun should go down while he was still alive; for it is written for them that the sun shall not go down upon one that has been murdered. And one of them said: Let us give him gall mingled with vinegar to drink. And they brought all to its fulfilment, and filled up the measure of sins upon their own heads. And many walked about with lanterns, thinking that it was night, and some stumbled. And the Lord cried out, saying: My Power, my Power, thou hast forsaken me! (or, hast thou forsaken me?) and thus saying, he himself also was taken up (or, and when he [the Lord] said thus, he [the Power] was also taken up).

"And at the ninth hour the veil of the Temple of Jerusalem was rent in twain. And then they drew out the nails from the hands of the Lord, and laid him on the earth. And the whole earth quaked, and there arose great fear. Then the sun shone out, and it was found to be the ninth hour. But the Jews rejoiced greatly, and they gave the body to Joseph to bury, as it had been observed how many good deeds he had done. And he took the Lord, and washed him and wrapped him in fine linen, and brought him into his own sepulchre, which was called Joseph's Garden.

"Then the Jews and the elders and the priests, seeing what an evil deed they had done to themselves, began to beat their breasts and to say: Woe for our sins, for the judgment is at hand, and the end of Jerusalem.

"And I, with my companions, was grieving, and, being wounded in heart, we hid ourselves, for we were sought for by them as malefactors and as wishing to burn the Temple. And besides all these things, we were fasting and sitting down and weeping, night and day, until the Sabbath.

"But the scribes and Pharisees and elders were gathered together with one another, for—having heard that the whole people are murmuring and beating their breasts and saying: If such mighty things are done at his death, see how righteous a man he is,—the elders were afraid and came to Pilate begging him and saying: 'Give us soldiers that we may guard his sepulchre for three days, lest his disciples come and steal him away, and the people suppose that he is risen from the dead, and harm us.' And Pilate gave to them Petronius the centurion with soldiers to keep the sepulchre. And with them came elders and scribes to the tomb, and they, with the centurion and the soldiers, all those who were there to-

gether, rolling a great stone, laid it upon the door of the sepulchre, and upon it they plastered seven seals, and pitched a tent there, and kept guard.

"And as the Sabbath was dawning, early in the morning, there came a crowd from Jerusalem and the surrounding country to see the sepulchre which had been sealed.

"But in the night in which the Lord's day was drawing on, as the soldiers were on guard, two by two, according to their watch, there came a great voice in heaven, and they saw the heavens opened and two men descending thence, with great radiance and standing at the sepulchre. And that stone, which had been placed upon the door, rolled away of itself, and withdrew to one side, and the sepulchre was opened and both the young men went in.

"The soldiers seeing this, awoke the centurion and the elders, for they also were present keeping guard; and when they had related what they had seen, again they see go out from the sepulchre three men, and two of them holding upright the one, and a cross following them; and the heads of the two were reaching to heaven, but the hand of him that was held upright by them extended above the heavens. And they heard a voice out of the heavens, saying: 'Didst thou preach (obedience) to them that are asleep?' And an answer was heard from the cross, 'Yea,'

"They (the watchers) then deliberated one with another to go away and show these things to Pilate. And while they yet consider the matter, the heavens appear again open, and a certain man descending went into the sepulchre. When they saw these things, the centurion and those who were with him hastened by night to Pilate, leaving the sepulchre which they were guarding, and they related all they had seen, in great anxiety, saying: 'Truly he was a son of God.' And Pilate answering said to them: 'I am pure of the blood of the son of God; but this seemed best to you.' Then all drew near and entreated him and besought him to command the centurion and the soldiers to say nothing of what they had For it is better for us, they said, to be guilty of the greatest sin in the sight of God than to fall into the hands of the people of the Iews and be stoned. Therefore Pilate ordered the centurion and the soldiers to say nothing.

"And at the dawn of the Lord's day, Mary Magdalene, a disciple of the Lord, who, afraid of the Jews because they were inflamed by anger, did not at the sepulchre as women were wont to do over the dead and those that were beloved by them, taking her friends with her, came to the sepulchre where he was laid. And they feared lest the Jews should see them, and they said: 'Though we were not able to weep and to wail in that day in which he was crucified, yet now at his sepulchre we may do so. But who will

roll away for us the stone that was laid at the door of the sepulchre, so that we may enter in, and sit down beside him, and do what is due? For the stone was great, and we fear lest some one may see us. And if we be not able, we may cast down at the door what we are bringing in remembrance of him, and weep and wail until we come to our own house.'

"And going on, they found the sepulchre opened, and drawing near, they stooped down there, and they see there a young man sitting in the midst of the sepulchre, beautiful, and clothed with a most brilliant robe, who said to them: 'Why have you come? Whom do you seek? Is it the one who was crucified? He is risen and gone away; and if you do not believe, stoop down, and see the place where he lay, that he is not there; for he has risen and gone away to the place whence he was sent.'

"Then the women were afraid and fled.

"And it was the last day of the unleavened bread, and many went (out from the city) to their homes as the feast was ended. But we, the twelve disciples of the Lord, wept and grieved, and each one grieving at what had happened went to his house. But I, Simon Peter, and my brother Andrew, took our nets and went away to the sea; and there was with us, Levi, the son of Alpheus, whom the Lord"

If Pseudo-Peter had written this Gospel about 120 A.D., as Harnack and others maintain-not all of them from pure zeal for the defence of the Four Gospels—the recently discovered MS. would contain the earliest written document attesting the authenticity of our Gospels. But, in point of fact, Peter's Gospel is not as old as Tatian's "Diatessaron," and cannot claim such a strong inferential value as the latter work. For while Peter cites single passages of the Gospels, Tatian harmonizes the canonical Gospels bodily, so as to form one continuous whole out of them. Our reader well remembers that a few years ago the actual "Diatessaron" of Tatian was recovered, and published in Rome by Ciasca on the occasion of our Holy Father's jubilee. Such rhapsodies as appeared in the Boston Commonwealth2 are, therefore, entirely out of place. "Half a century of discussion," the writer said, "is swept away by the recent discovery at a stroke. Brief as the recovered fragment is, it attests indubitably all four of our canonical books."

To avoid misunderstanding, we must again guard our reader against the belief that Harnack and his followers date Pseudo-Peter back to about 120 A.D., out of regard for the authenticity of our Four Gospels. They are rather intent on showing that Peter cannot have used John's Gospel, but that either John used Peter's,

¹ Tatiani, Evangeliorum Harmonie Arabica 1888.

² December 31, 1892.

or both used a common third one. Thus, they wish to destroy the value of Peter's Gospel in the Johannine controversy. Again, since Peter does not mention any apparitions after the Resurrection, the above critics maintain that the story of the apparitions in our four Gospels is nothing but a later addition from legendary sources, the earliest Christian records being wholly without such miraculous reports.

But the more modest claims of Peter's Gospel may be asserted with the greatest emphasis. It has been the boast of the Tübingen school, especially, that our Four Gospels are, partially at least, nothing but "Tendenz-Schriften," or "tendency-writings." Now, Peter's Gospel shows us what a real "tendency-writing" is like. "Not more evidently does the sun surpass the moon in brightness than do our four Gospels excel in glory this imitation of them," are the words of the writer in the Boston Commonwealth

Another point, equally direct against our modern critics, is the equality with which Pseudo-Peter treats the four Gospels. "He uses and misuses each of them in turn," says Mr. Robinson. "To him they all stand on an equal footing. He lends no support to the attempt which has been made to place a gulf of separation between the fourth Gospel and the rest, as regards the period or the area of their acceptance as canonical." How many and serious attacks on the fourth Gospel have been made of late by the different classes of Bible critics, is a matter too well known to my readers to need further explanation. But in this point, too, Tatian's "Diatessaron" surpasses Peter's Gospel in evidential value.

A third point, which has been satisfactorily settled by the recovery of Peter and Tatian, has been well explained by Father Lucas in the Month of January. The author of "Supernatural Religion" had identified the Gospel according to the Hebrews with Tatian's "Harmony," and with the Gospel of Peter. "The Gospel according to the Hebrews," and "the Gospel according to Peter," were, according to that plausible writer, "substantially the same work." Again, no one "had seen Tatian's 'Harmony,' probably for the very simple reason that there was no such work, and the real Gospel used by him was that according to the Hebrews." Truly, a more thorough answer could not have been given to the above author, even by his deadly enemy, than has been furnished by the Nemesis of history. Both Peter and Tatian were recovered almost immediately after the writer had flung his bold theory before the reading public, and Peter and Tatian are not only distinct from each other, but both differ, too, from the Gospel according to the Hebrews.

¹ Supernatural Religion, sixth edition, i., 420; ii., 159 f.

These, then, are the results of our investigation: 1. The MS. found in the tomb at Akhmim contains a fragment of the apocryphal Gospel according to Peter. 2. The Gospel according to Peter was written about the middle of the second century. 3. Though the newly-recovered text of Peter's Gospel does not yield as weighty an argument for the authenticity of our four Gospels, as is afforded by Tatian's newly-recovered "Diatessaron," it furnishes at least another incontestable proof that the four Gospels enjoyed. as early as the middle of the second century, that peculiar authority for which they have been noted in all ages of the Church, and that the recent theories of the Bible-critics find as little support in the actuality of the past as they have in the scientific researches of the May we then expect universal peace in the hostile camp of the Rationalistic critics after the treasures of the tomb at Akhmim have been brought to light? We fear the words spoken by the God Incarnate are true, even in our days: "If they hear not Moses and the prophets, neither will they believe, if one rise again from the dead."

A. J. Maas, S. J.

THE LATE ARCHBISHOP ULLATHORNE.

IT is to be regretted that, as each generation passes by, the highest types of that generation become extinct. It is not only the men themselves who become extinct, but their types which were the products of their surroundings. Take the ecclesiastics of the present century, whether Catholic priests or Protestant ministers; and compare the types of say 1830, or 1850, with those of the last dozen or twenty years. Speaking roughly we may say that Catholic emancipation changed the public presentation of priestly life as much as Ritualism changed the style and guise of As long as priests were under the ban of penal laws, and compelled to dress like country farmers to avoid indignities, their "presentation" had no relation to their divine office; and as long as parsons were only "ministers," but not "priests," their "presentation" was that of educated, refined laymen. Hence the passing away of soon-to-be-forgotten types; those of the priests who were forced to hide their priestly character, and those of the parsons, who made no pretension to be priests.

"I received the order of priesthood on the Ember Saturday of September, 1831," wrote the late Archbishop Ullathorne in his "Autobiography." That would be nearly sixty-two years ago. Only sixty-two years ago! Yet we do not imagine that in any like period of any age—bar only the age of madness, called the Reformation—there was ever such a revolution in priestly life. "Mr. William Ullathorne" was then at Downside or at Prior Park; and the very thought of an English Catholic College at that period is the suggestion of Catholic penalties and humiliations. Who that has read the story of Downside or of Stonyhurst, of Ushaw, Crook Hall, or Old Hall Green-the last being the offspring of Douay and of St. Omer; of Sedgley Park—whose greatest pupil was John Milner; or of Oscott, whose founder was that same John Milner, the ever to be venerated bishop and author; could have failed to grasp the meaning of that isolation which English Catholics converted into a triumph? Archbishop Ullathorne knew the English colleges at a period when they were just emerging out of the persecutions of the penal laws, and the still greater persecutions of Protestant bigots. He was therefore a link between the fierce past and peaceful present. He knew all about "glorious Douay" the ancestor of nearly all the English colleges, the home of English exiles, of future martyrs; he had been brought up in a

country town where the only dogma of all his acquaintances was "No Popery, no Papists, no Mass;" so that, in after life, he could measure the value of his comparative peace by the recollection of the social bitterness of his youth. And being always of noble nature, firm, manly and irreproachable, he was selected by Pope Pius IX. to be the first Bishop of Birmingham; less for his capacity—which was admitted by every one to be adequate—than for his grand outline of character, which was typical.

What may be called the history of Dr. Ullathorne is also naturally the past history of English Catholicism, from about 1815 to about 1800. No one knew that history better than Dr. Ullathorne. He had lived through the twenty years which were antecedent to emancipation; when the fierce fights in the House of Commons, and in the whole country, breathed the spirit of the three centuried hatred of the Catholic faith. He remembered the time when the bells of some Protestant churches were tolled, to signify the deathknell of Protestant liberties; Catholic emancipation being regarded as "the forerunner of Papal interdicts, and the rekindling of the fires of Smithfield." When the Hierarchy was restored, he wrote an admirable book, to try to prove to members of Parliament that the Pope meant no discourtesy to the queen or to her bishops or to her Privy Council; since before "the Hierarchy was re established every possible precaution had been taken by the Holy See to avoid giving offence to the government and the people of England;" and he entered into the most minute particulars of every step in the negotiation as between the Vicars Apostolic and the Holy See. It may be well perhaps at this point to give an outline of the reasoning by which he sought to convince Englishmen of Catholic lovalty.

A hundred years before the time of Catholic emancipation Pope Benedict XIV, had drawn up the constitution by which the Catholic Church in England was to be regulated. But, as Dr. Ullathorne argued, the time of Benedict XIV. was the time of penal laws against English Catholics; it was the time when liberty of conscience was denied to them; it was the time when they had to be educated beyond the seas, and when the religious orders had not a single house in England; when even parochial divisions were not permitted; and when the very few places of Catholic worship were mostly chapels in noblemen's houses, or such barns or lofts as might offer secure hiding-places. This had been the case for three long centuries. But now,—argued Dr. Ullathorne with obvious truthfulness (and we are giving only the substance of his ingenuous pleading) the penal laws have been removed from the statute book. There is at least the legality of a perfect freedom of Catholic action. Catholics have already increased in numbers, and they are building churches and schools all over the country; so that the only thing that is wanting is the ordinary government of a Catholic province, and therefore of the power of legislating in a Provincial Synod. Moreover, argued Dr. Ullathorne, the Church in America has obtained its Hierarchy; Australia and the West Indies have been equally privileged; is it not monstrous, then, that England should be singled out for privations which were only consistent under the odious reign of penal laws?

But there were other points, equally significant to the legislature. From the days of the distinguished minister, Mr. Pitt, English statesmen had frequently affirmed that Catholic Vicars Apostolic were not conformable to British ideas. They had suggested that there should be Catholic bishops in ordinary. And though they did not realize the full meaning of a Hierarchy, nor "the arrogant assumption of a Cardinal Archbishop of Westminster," they approved of the institution, "a Catholic Episcopate." Now all this was well known at Rome. For many years there had been discussion on the question, " was it wise and prudent to restore the Hierarchy in England?" and at last Monsignor Barnabo, well knowing the Pontiff's mind, said to Bishops Wiseman and Sharples, who were consulting with him in Rome about their troubles, "You will always have trouble till you ask for a Hierarchy; ask for it, and I will support you." Very soon afterwards the English Vicars Apostolic received a letter from the Holy Father with this instruction, that they should divide their eight vicariates into twelve bishoprics; and in 1847 the scheme was drawn up, and was ready for presentation to the Pontiff. It was decided that Dr. Ullathorne should be the bearer; and in May, 1848, he started for Rome; being the first emissary in regard to the new Hierarchy.

Dr. Ullathorne did not write much in his letters nor in his autobiography on the subject of the "Restoration of the Hierarchy"; yet what he did write was well worth remembering. English Catholics in these days, who have not passed life's meridian, can scarcely figure the "furious heat," as Dr. Ullathorne called it, of the whole nation on the subject of the "Usurpation." When Dr. Ullathorne wrote (in 1850) "the whole country is in a boil on the subject"; and again (in 1851), just after the passing of the "Ecclesiastical Titles Bill," "A few bishops will have to go once into jail, and the whole matter will be ended"; and again, in the same year, "the Times gave me a thundering article when noticing my letters to Lord John, and called me 'a man of the most astounding impudence'"; all such comparatively mild expressions fail to convey a just idea of the national ferment, intoxication and delirium. The present writer well remembers how men of brains and education were so carried away by the popular shout of "papal

aggression," that nothing else was talked of, or thought of, or written about, for certainly a month or six weeks. No Protestant kept his head during that crisis. From Lord John Russell, who penned a firebrand to the Bishop of Durham, prophesying the total destruction of English liberties, to the least educated of the street orators or the tavern brawlers, there was no one who had the common sense to ridicule the "storm in the tea-cup," which was soon to be followed by the repeal of the Titles Bill. When the storm was all over, it is due to Englishmen to admit frankly that they did their best to make amends by their courtesy; while, as to Lord John Russel, even the comic paper, *Punch*, was unable to resist the temptation of describing him as "the naughty boy who chalked up 'No Popery,' and then ran away."

The no popery scare had, however, left its traces; and in the year following the Ecclesiastical Titles Bill another bill was introduced to obtain the government inspection of Catholic convents. It was offensively alleged in the preamble of the bill that "it was expedient to make provision for preventing the forcible detention of females in houses wherein persons were bound by monastic vows." Bishop Ullathorne responded in a vigorous pamphlet entitled "A Plea for the Rights and Liberties of Religious Women"; and this appeal to the manliness of the British public caused the bill to be relegated to the waste-paper basket. A second movement, however, in hostility to Catholic convents was inaugurated by the too valiant Mr. Chambers, the agent of the Evangelical and Protestant Alliance. Bishop Ullathorne had no fear as to the result, and the request made in Parliament for a committee of inquiry was only followed by some desultory conversation.

It may be well to keep to more or less historic events with which Bishop Ullathorne was connected before we proceed to think of him, as it were, personally, or with reference to his very winning characteristics.

Let us glance then at the period of the promulgation of two dogmas—those of the Immaculate Conception and Infallibility. When the doctrine of the Immaculate Conception was being discussed in Council, Dr. Ullathorne was rejoiced when "the voice of the theologians was corrected by the voice of the Bishops." He believed in spiritual authority more than in reason. As he expressed it in a private letter to an intimate friend, "I am delighted to see the Bishops capsizing the theologians." "The Bishops are all authority and the theologians all reason." And when the welcome telegram reached him, "The Pope officiating at St. Peter's, after the Gospel at 11 o'clock, promulgated the expected decree; the Immaculate Conception is declared of faith, and whoever denies it is a heretic; two hundred Bishops present; Rome drunk

with joy." Bishop Ullathorne wrote to a friend: "It is curious, that so long as the Immaculate Conception was believed, received, and preached with a simple, unreasoning faith, as it always was in the East, there was no difficulty about it. The moment reason touched it, it became obscured and darkened, and the language of divines got perplexed; and it has taken six centuries to get back from reasoning to faith, and for the wisdom of man to get back to the foolishness of faith."

The Bishop wrote in the same spirit of the dogma of Infallibility; and perhaps it may be interesting to dwell for a moment on his letters written from Rome during the time when the Vatican Council was being held. Having left England in November, 1860. he remained in Rome until July, 1870; and his letters during the eight months breathe a very tender perception of whatever was Roman in the best sense. Naturally, he was "full" of the Vatican Council. There was probably no exaggeration in the following sentence: "Such an assemblage of Prelates as was seen at the Vatican Council, whether you consider numbers or the character of their training and breadth of experience, was never witnessed in this world before." We follow him, with almost a sense of being present, as he pictures the eight tiers of Prelates, with their silver copes and pure linen mitres; some six hundred Bishops, besides the cardinals, ranging from the two sides of the apse, with ten Patriarchs, and numerous Abbots and Generals of Orders, in their places of precedence or degree. Bishop Ullathorne's place in the Synod, as he described it in one of his letters, was "in the third row from the top, having the Primates and Archbishops at his back, and the number on his seat was 275, the numbers going from 1 to about 700."

The many comments or reflections of the Bishop, on both the work and the spirit of the Council, were so excellent that it would be a treat to transcribe all. It must suffice, however, that we say that there is probably no publication which more profoundly yet more agreeably describes the council. And equal praise must be bestowed on the Bishop's letters on Roman treasures—treasures such as Catholics alone can love and value. His account of some of the relics is very touching. The Holy Crib and the Holy Cross moved the Bishop so deeply that he makes us feel with him as he gives expression to his emotion. "These are the great things of Rome—greater than the Colliseum, greater than St. Peter's even, for they will shine in heaven at the last day when the rude works of men have perished." "Keep, then, to the rude Crib, keep to the rude Cross, that sweetens the water of salvation, that you may be known to belong to Him who had the one for the pillow of His divine infancy, and the other for the pillow of His dying

hours. You will find it all in your rosaries." Writing on the Holy Effigy of our Lord, the bishop says: "It has those large, clear, out-looking eyes that we expect in Him whose humanity was ever contemplating the Divinity, and is never concentrated on its own human nature, to be absorbed in it, or to feel its mortality as anything but a load and a sorrow that is to be torn to pieces as a sacrifice." And so, too, of other relics, he writes so contemplatively that his letters are as good as meditations. But to say a word on his "Easter Day in Rome." The year was 1870, when Pope Pius IX. was still Pope and king in his own city. "Yesterday, Easter Sunday, St. Peter's witnessed such a spectacle as was never witnessed before." And the explanation was easy to be given. Eight hundred mitres in St. Peter's on Easter Sunday was a spectacle unique and historic. Bishop Ullathorne was on the top of the Colonnade which runs around the front of the Vatican. so that he could see the whole wondrous sight from one point. He speaks of the Pope's voice (and no one who ever heard Pius the N:nth's voice, whether outside or inside the Vatican, can fail to justify the truth of the assertion) as being as musical as a well-toned instrument; so that "every one heard every word of the absolutions. And when he lifted his arms and voice for the Benediction, the voices of that sea of people, which had been as the sound of many waters, were hushed." And directly afterwards the cannon roared from St. Angelo, and the bells of all the churches rang out gladness, so that even the martial music of the bands of two regiments was somewhat lost in the uproar of glad sounds. Alas! the scene was not to be renewed, for many years of rudely secularized Rome. Pius IX. became a prisoner within the Vatican; and to this day the Pontiff cannot give his benediction, urbi et orbi, from St. Peter's.

Dr. Ullathorne, as all English Catholics know, was a Benedictine; so that it was natural that, when in Rome, especially, on St. Benedict's day, he should visit the grand and beautiful cathedral, and should look "through those ninety pillars, each of them one block of brightly polished granite some forty feet high," and should gaze on the august figure of our Divine Lord, seated on His throne; and should listen rapturously to the Benedictine simple chant. Afterwards came the gathering of the Benedictines. In the refectory; as he tells us, were black Benedictines and white Benedictines, blue Benedictines—the Olivetans, and Oriental Benedictines—the Mechitarists, with their Archimandrite in purple robe and white beard. There too was the Arch Abbot of Hungary, and the Abbot of the great Abbey of Einsiedeln; with the Abbot of Catanea; and also the General of the Jesuits, who always dined in this refectory on St. Benedict's day,

as the Benedictine General did in the Gesu on St. Ignatius's day. There too was the President General of the English Benedictines, and the General Superior of the American Benedictines: with a pleasant array of the monks and pupils of the schools.

And, as being appropriate to this subject of the Benedictine life, and of Dr. Ullathorne's personal devotion to his order, the following amusing episode may be mentioned. Being invited to preach in one of the London Catholic churches,—somewhere about the year 1840—Dr. Ullathorne ascended the pulpit in his religious habit, to the surprise and consternation of the congregation; and was subsequently taken to task by the senior priest of the church for such an outrage on British sentiment and susceptibility. That a priest should preach in the habit of a religious order called for a sharp rebuke, even from a priest. How little was it thought in those days—fifty years ago—that, within a quarter of a century, even the Anglican clergy would vie in their assumption of Catholic attire (some Anglican clergy even affecting a religious habit) and that the good British public would become as reconciled to priestly robes as for centuries they had been inimical to the word priest.

And while on this point of the religious habit, it may be relevant to note the ardor with which Bishop Ullathorne always regarded the religious life. Over and over again he speaks of his longing to leave the world, and to end his days in some Benedictine retreat. At one time we find him with the monks of Mount Mellerari; and dwelling on the revival of his aspirations to quit the world, and live and die in the beloved cloister. He lingers with affectionate sympathy on the Benedictine chant. He tells us how the two long choirs of white robed monks alternately sang the psalmody in three simple but sweet notes; with long pauses for reflection in the middle of each verse; and he adds that even the Gospel was sung in the same tones; while the Abbot gave the Benediction in the same tones; so that "the sweet accents with solemn pauses of silence, of that never varying monotony of rise and fall, under which the ever varying sense of the psalmody advanced, seemed to express the acquirement of an unchangeable peace and patience of soul; whilst the whole of the change of the movement was interior and contemplative. It seemed to realize that sentence of St. Augustine, 'Join thyself to eternity and thou shalt find rest.'" cannot help noticing Dr. Ullathorne's love of the cloister in connection with his tremendous energy in so many countries. seemed always to retain a vocation for the monastic life, along with—if that were possible—an equally marked vocation for the active life.

To return, however, to events of contemporary history. It was in the year 1870 that Bishop Grant died, of whom Bishop Ulla-

thorne said truly, "a saint has departed from this world." The first Bishop of Southwark, a part of London, this admirable and typical man lest a memory behind him which was untarnished by a single weakness or imprudence. This is not the place in which to speak lengthily of his life. "The image of that vibrating soul," Bishop Ullathorne wrote, "is fixed on my mind;" and from the time when Dr. Grant was Rector of the English College in Rome to , when he expired in Southwark, his whole life was a hymn of pure service. "Dying for two years," nothing changed the tone of his mind, nor the unwavering gentle humor of his character. "When the Hierarchy was being negotiated in Rome," writes Bishop Ullathorne, "Dr. Grant was the animating spirit." And truly does Dr. Ullathorne remark, "Look at the Diocese of Southwark as it was when he took it, and as it is now. . . . He brought up his will to his work, until he became all will." But we must not linger on this really beautiful life. The present writer, however, may be permitted to recall an episode, as illustrative of Dr. Grant's retentive memory, and also of his playful mood and spirit. In the year 1849, when travelling from Southampton to London, the present writer noticed a gentleman in the carriage who seemed to have a more or less priestly look. Engaging the apparent clergyman in conversation—and the fact having transpired that this clergyman lived somewhere in Southwark, the present writer asked him if he happened to know any local pastor who could baptize a child of six who lived in Southwark. "No, I do not know any such clergyman," said the reverend gentleman. "Perhaps," boldly inquired the present writer, "you do not belong to the Church of England?" "I cannot say I do," was the reply, "I am the Catholic Bishop of Southwark." Fourteen years passed; and in the year 1863, the present writer received an invitation to dine with the "Catholic bishop of Southwark," whom we had not seen nor heard of in the long interval. The very first remark the bishop made after his salutation,—and he made it with a humorous smile which was peculiar to him-was, "Did you ever get anybody to baptize that Anglican child?"

To take a leap to the year 1886, we find Dr. Ullathorne writing from Oscott to Father W. Amherst, and speaking of that marvellous spectacle, a Cardinal presiding over a Plenary Council in Australia. This fact brought to his mind his own struggles in that far-off country; when in 1833, he had "to do everything with three priests; one of whom I suspended, and with another I had immense difficulties." Dr. Ullathorne was indeed, as Cardinal Moran called him, "the living link between the old and the new;" the "Bishop of Birmingham" being no more strange to an Englishman, just after the restoration of the Hierarchy, than would

have been an Australian Cardinal to an Australian of 1833. From the time when young William Ullathorne lived in his father's country house, aspiring to become a priest at some future day, to the time when Australia's first Cardinal followed upon Dr. Ullathorne's "three priests," was a world of progress to both Catholics and Anglicans; to the last perhaps even more than to the first; for the Catholic change was most conspicuous in civil liberties, while the Anglican change was from Evangelicalism to Ritualism.

II.

Dr. Ullathorne's friendships were many and earnest. Naturally we think first of his friendship for Dr. Newman, in regard to whose life, work and character, he has left much affectionate criticism. When writing on Dr. Newman's controversy with Mr. Kingsley, he described it as "the keenest scarification-and that of a muscular Christian—that ever man gave to man." Probably no one knew Dr. Newman better than did Dr. Ullathorne; for he could say of him, and could say to him in a letter even so far back as 1864, "we have now been personally acquainted, and much more than acquainted, for nineteen years; during more than sixteen of which we have stood in special relation of duty towards each other. This has been one of the singular blessings which God has given me amongst the cares of the episcopal office." Then, writing of Dr. Newman's vast literary labors, he adds that the establishment of the Congregation of the Oratory of St. Philip Neri; the commencing the founding of a university in Ireland; the many years of hard work at the mission in Alcester street, Birmingham, and the labors for the carrying on of the Convent of the Oratory; with other original and deeply responsible work; all such initiation and prolonged fatigue were additional to scholastic and literary toil, and made Dr. Newman's life very busy. And eighteen years after the letter quoted above, Dr. Ullathorne could address "My Lord Cardinal," and could speak of the "forty years of friendship and confidence that have enriched my life," To which letter of devotion the Cardinal could reply, "God reward you, my dear Lord, for your tenderness towards me, it is a token of sympathy which now, in my extreme age, encourages me in the prospect of the awful journey which lies close before me," These two men, alike perhaps in a certain heroism of patience, had passed careers as broadly different as possible in the outlines of their purpose and their struggle. We can scarcely figure Dr. Newman as fighting the secular authorities in distant colonies; and we can scarcely figure Dr. Ullathorne as heading a school of Anglican thought in a University where there was not even a single Catholic. Both men were typical, were superlative; and in their old age must have

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enjoyed each other's friendship all the more from the very variety of their experiences.

Dr. Ullathorne had many friends in Ireland, where he passed, he tells us, nearly three years; and it is interesting to hear him giving his impressions as to the solution of the political difficulties of his day. "Does it really at this day require to be stated that for nearly forty years I have been the devoted servant of the Irish people?" He enters minutely into all he has seen and known in regard to the tortured interests of Irishmen. From 1832 to 1840 he lived among the Irishmen who had been transported for the affairs of '98; he knew the inmost hearts of these men, who represented about three-quarters of a century of the history of the Irish people. "I spent the best years of my life in laboring to mitigate the evils, redress the wrongs, and soften the sorrows of 30,000 Irishmen, most of which had been brought about through the misgovernment of their country." And it may be said that to Dr. Ullathorne, mainly, was due the bringing to an end of the horrible system of transportation which long prevailed. The rigors of that system in the colonies were reduced at least one-half, and were finally very nearly put an end to, by the persevering protests and entreaties of the good missionary who "never took a refusal." The whole gist, in his opinion, of Ireland's wrongs was the confiscating of the land that belonged to Irishmen, and passing it over to Englishmen and Scotchmen, who "ignored the Irishman's perpetual right to his land." And, he adds, "until our legislators understand this they will never know what they have to deal with."

It was in the year 1884 that he visited France: and we will give an extract from his impressions of the Holy Curé of Ars, not only for its vivid portraiture of the man, but because it reveals his own faculty of perception. He heard the Curé preach, and he says, "As he went on, the vivacity and vigor of his spirit, mantling through his feeble suffering frame, increased in energy. His voice, soft yet shrill, rose into cries of anguish as he spoke of sin; his hand, doubled up, pressed itself between his eyes on his forehead; his eyebrows shrank together and he wept as he always weeps when he speaks of sin. Then he opened his eyes again; and those deeply shaded recesses became full of light; and he threw his feeble hands appealingly towards the people, who listened in profound attention and even awe. Then his eyes were cast up and his whole figure seemed to follow. He spoke of God, so good, so amiable, so loving; and his whole being seemed to circle round his heart, on which his hands, his shoulders, his whole person seemed to concentrate. It was impossible not to feel that God was wholly there, and drew his whole being to that centre. Then there was one word about being in the heart of Jesus; and in that word I felt he himself was there in a way I shall not easily forget." But when we once begin to quote Dr. Ullathorne's descriptions on almost every subject which he pictured, it is difficult to know where to leave off.

It was the same with his visit to La Salette: "You can have no idea of the giant grandeur of this mountainous country, and of the contrast of the beautiful slopes and soft verdure which sweep down on all sides towards the fountain of La Salette. Our Lady has certainly a very perfect judgment in selecting her sanctuaries. I returned quite full of La Salette, about which I must publish something in honor of Our Lady, Our Mother; for since I stood on that lovely mountan 'Our Lady' has grown to be a phrase too cold for me."

A word may be added in regard to the Beatification of the English martyrs. Dr. Ullathorne was a descendant of Sir Thomas More, the illustrious Chancellor, Saint and Martyr-ever to be honored. "My grandfather," he wrote, "used to talk of his mother having the watch and the garter of Sir Thomas More, as Knight of the Garter; what became of them I do not know; but at Stone the nuns have a considerable piece of his hair shirt and a rough one it is." In speaking of the Martyrs from the beginning of Queen Elizabeth's persecutions, to the end of William and Mary's coarse spitefulness, Dr. Ullathorne says that the English persecutions were far worse than those of the Roman Emperors. And he remarks, "what a figure the Protestant bishops and ministers cut in it!" Their worldliness seems to have almost puzzled Dr. Ullathorne. But he is so full of admiration for the English Martyrs, and naturally for his glorious ancestor, Sir Thomas More, that he cannot help a passing regret that the high spirit of the clergy of those times should have been followed by "the povertystricken spirit of our time." Yet doubtless, were the persecution renewed, the modern spirit would rise to the occasion.

III.

And now to speak particularly of Dr. Ullathorne's spiritual writings—perhaps even superior in their grace to his other writings—and to briefly hint at their compass and their objects.

It is not perhaps too much to say that these letters are all perfect of their kind. Profound, yet most simple in expression; full of wise counsel, yet delightfully playful and natural; it is all the same whether he writes to novices or to Reverend Mothers; in every case he always says the exact thing. We had selected a large number of extracts; but to give them would make this paper too long. His letters on Spiritual Darkness, Interior Purgation, Adhering to the Will of God, Special Interior Trials,

Recollection, Confidence, Silence, Poverty of Spirit, Self-sacrifice, Indiscreet Austerities, indeed on most of the trials or virtues of the Religious State, are, all of them, exceptionally worth reading. Naturally, when some Benedictine nuns were setting sail for Ausstralia he was reminded of his own departure for that far off land, when as a young and solitary priest—one of four in the whole colony —he had to brave any hardship that might be before him. He advises the emigrant nuns to be "devout for those souls who have perished beneath the waters"; a beautiful yet rare devotion, and one of which few vovagers care to think. He calls the mission of the Sisters "a spiritual martyrdom"—going from home, and to a world where there are no friends. "When you tread that ground (Australia) I have so often trodden, pray for me," We know that the good Archbishop always remembered Australia as a rough school in which he had learned to brunt the world, and as having fortified him for his after comparatively mild troubles. It was in Australia too that he had thoroughly studied the Irish nature; and he would often refer in Birmingham, to his "Irish education," which, as he used to say had taught him a good deal of human nature—a good thing for a priest to learn in the best schools.

In one of his letters he gives a curious, pleasing tradition accepted as at least probable by the Jews. After mentioning that it is believed that Abraham offered up Isaac on the exact spot where Adam had been buried, he says that Adam nearing his death, sent Seth to implore the angel who guarded Paradise, to let him have one of the fruits from the Tree of Life. Seth, bringing it, was then asked that, when Adam died, this fruit should be placed in his mouth, a communion from the Tree of Life. So it was done, and from it sprang a tree, and that tree came at length to the ground, and of its wood was made the Cross on which our Lord hung in sacrifice—over the grave of Adam, the first man.

We are tempted to give two or three short maxims, which the archbishop would let drop in his letters, such as: Second thoughts are not always best, but third thoughts that bring us back to first thoughts. Quite as many troubles come from too much zeal as from too little action. There is no sore so sad as discontent with self. Where there is no sin there may be trouble, but there is no real distress. No harm ever comes of doing what is right. There is a justice which God owes to His own eternal plans. It belongs to the magnificence of His justice to Himself and to His everlasting plan that He shou d complete His work To this magnificence of that justice to Himself may our will ever open. And finally, it is a good thought of the Archbishop that time is only a sense of our earthliness; for if we could be wholly absorbed in God in this life, we should have no sense of time.

It would be unnecessary to speak here of the Archbishop's larger works: his "Groundwork of Christian Virtues," over which he spent great labor, and of which he wrote to a friend: "Every sentence has to be weighed theologically; I am just now at the ticklish part of the book; namely, the degrees of humility"; his "Endowments of Man," so highly praised by Cardinal Newman; or his "Ecclesiastical Discourses," full of pregnant and often original composition. The Archbishop had a style of his own, which united the critical keenness of the student with the broad sympathies of one who knew the world. He was never dull, heavy, dry; he wrote as a man of warm feeling, and seemed to think, with Cardinal Newman, that it was a mistake to speak of man as primarily a rational being; he is primarily a being of sentiment and affection.

IV.

It is twelve years since the Archbishop celebrated his Golden Jubilee. He sang his Jubilee Mass and his Te Deum in the College Chapel of Oscott; and the whole college, even to its youngest member, received Holy Communion at his hands. He became dangerously ill in the autumn of 1884, but rallied so as to renew his public work in his diocese. In the next year he wrote several wonderful letters, and we may spare a moment to quote one or two of his criticisms, those on George Eliot and Thomas Carlyle. As to George Eliot, he wrote: "Her whole life was a conflict between her Christian reminiscences and the fragments of her conscience and Positivism; and this, with German Hegelism, underlies her whole soul in her writings, although the sectarian pietism of her (Calvinist) family furnished many of her chief characters. I have read three of her books, and should say that they were unhealthy in tone, owing to the mind from which they spring." The Archbishop, however, is careful to add elsewhere that "Adam Bede" is both "keenly religious" and "full of heart."

As to Carlyle, the two pages of criticism are as good as anything that has been written of that sage: "His philosophy was as egotistical as himself; its basis, derived from Kant and his school, purely egotistical. Notwithstanding his constant insistence on truth and honesty above all things, he could write to religious people in their own language without the least sense of religion in himself. He is always in the 'infinities' and 'eternities' without ever once asking the question, what is infinite, what is eternal? He has no object before him in it all." The whole criticism is as true as it is severe. Probably no Englishman of this century has more abounded in mental activity while having less object, less reality, than Carlyle.

The year 1880 was the last of the Archbishop's life. In the previous year he had been created Archbishop of Cabasa—the old Metropolitan See of Lower Egypt-and was in fair health and not very feeble; indeed, Cardinal Newman, who survived him, was the feebler of the two, and would lean on the arm of the Archbishop; but in the spring of the year 1880 he had a return of his complication of maladies, which terminated fatally in a few weeks. long as his strength lasted he read eagerly, and in one of his last letters he wrote: "I have been engaged with the second volume of Fr. Gasquet's book on 'Henry VIII. and The Monasteries.' What a revelation that book is; and what an illustration of the scoundrels of the Reformation." His illness, however, was of short duration, and as one of his faithful attendants recorded, " No one who saw him at that time could fail to notice how fearlessly, and in what a simple matter-of-fact way he set about what he called 'the business of dying.' "How simple it all is when the end comes," he remarked to his physician. And to another friend he said: "I have been thinking that if there is anything in my life that may induce God to have mercy on me, it is that I have never forgotten to take care of His nuns." At the very last he was asked by a friend who had heard him utter some words about the angels, "Do you see St. Benedict and the angels?" "Yes, I see them." was the reply. And he continued to ejaculate tenderly until he died.

On the Feast of St. Benedict he expired. The funeral obsequies were conducted at St. Chad's, Birmingham; and he was buried in St. Joseph's Chapel, in the Convent Church of St. Dominic, Stone; in that convent church where but a short time before the Reverend Mother Margaret had been buried, of whose memory he had written lengthily and beautifully.

V.

After reading through the Archbishop's writings, and especially the Autobiography and the Letters, we feel that we have been studying one whose breadth of character was a fine natural soil for his grand piety. Nor was the Archbishop ever anything but real—true to his instinctive manliness and nobility. It was a splendid education for the after-missionary to be cast among the varied sects of a Protestant neighborhood, he being himself strongly and stoutly built up in Catholic faith, sentiment and devotion. To a weaker mind such an education might have been risky, but to a sturdy, unflinching Catholic, with admirable parents to guide him, his early combats with a score of creeds were simply bracing. And so, too, his Colonial struggles and vicissitudes nerved him for his after-life in an English town. Birmingham is one of the rough

marts of British enterprise, where commerce is more thought of than the fine arts, and where Catholicity, fifty years ago, was of foreign growth. It was not a congenial nor a sympathetic atmosphere, yet Bishop Ullathorne so won all hearts by his straightforwardness that it was a common thing for those most hostile to his religion to come to consult him about worldly affairs—and about religion. He made numerous converts. His word was never questioned, for he was a true man. He therefore, naturally, became attached to his diocese, not only in a religious but in a social sense. A Benedictine, a man of books, a habitual student, he was nevertheless perfectly at home with the commercial classes; and in later years, when the name of "Newman of Edgbaston" was almost a household word with all classes in Birmingham, "the two great Catholics, Ullathorne and Newman," were as popular with the townspeople as in their own spheres. Now, when we remember that a very short period has passed since Birmingham like the rest of the English nation—went crazy over the "Papal Aggression," and sent forth its protests against such enormity, we can appreciate the admirable tact and the convincing virtues of the first Roman Catholic Bishop of Birmingham. To hear the Archbishop chat in old age, when in company with a few sympathetic intimates, about his personal recollections of "sixty years ago" (that was about the year 1830) was to be reborn into a period when the whole national English mind was deeply steeped in intense horror of Popery. Even the children, in those days, looked on a Jesuit and a policeman, or on any Catholic priest and a gruesome enemy, as having dread characteristics in common: so that it was not uncommon in the public streets for the young people to "give a wide berth" to the Popish priest who was known to be guilty of saying Mass. (Our friends, the Ritualists, who now talk of "continuity," must certainly look upon that link with mingled feelings.) Bishop Ullathorne had seen it all, had known it all; so that his feeling of intense gratitude for "better days" was enlivened by playful memories of the ugly past.

Yet it may be replied that the good Archbishop had such remembrances in common with many a score of Catholic priests. This is true; yet it was not given to every priest to have that robust force of endurance which was characteristic of the young and the old Benedictine. He was a sharp disciplinarian with himself, and therefore with every person under his control. No one ever got the better of him in a pitched battle—of the intellectual or the moral groove or kind. He was none the less beloved for that magistracy, by priests, or by laity, or by Protestants. A Bishop should be royal in his authority, for his subjects will not be loyal if he is not. The present writer has heard priests, laity and

Protestants, who knew the Archbishop and understood him, professing their warm homage for a Chief Pastor, who ruled others only because he ruled himself. If it might be permitted to institute a comparison: Dr. Ullathorne and Dr. Grant were alike in their self-ruling, yet different in their natural tone and in their manner. Dr. Grant was wonderfully simple and unspoiled; the world did not seem to have ever tarnished him; he might have been born without original sin, so far as the innocence of his presence betokened a natural guilelessness and purity. Was it St. Cyprian who said, "timor innocentiæ custos?" Yet the absence of the timor, when it seems absent from pure ignorance, is certainly the more winning and captivating. Dr. Ullathorne was a type of conquering duty; Dr. Grant, of almost absence of need of conquest.

And these types were bred of the Catholic faith alone; without the aid of cheerful surroundings in a social sense, indeed in spite of all surroundings, all enmities. English Catholics will forever owe a debt of gratitude to the ecclesiastics of the very doleful Protestant period. Such men as Dr. Ullathorne had a sort of life-long social martyrdom; and it was much the same up to about the year 1860. The Oxford movement first relaxed the chains of martyrdom. From that date there sprang up a rivalry—not a hatred. Dr. Newman, intellectually, relaxed the chains; Dr. Manning, socially and officially, relaxed them; and Dr. Ullathorne with Dr. Grant, and many other bishops and priests, passed their lives in weaving pleasant bands of sympathy. Our easy heritage is mostly the fruit of their toil. The Archbishop of Cabasa closed a three centuried period, which had been like the wanderings of the Israelites in the desert.

A. F. MARSHALL.

NOTES TO SHOW THE NECESSITY OF TRUE RELI-GION FOR RATIONAL MEN.

[The following Notes were left in manuscript by the gifted writer, whose premature decease is widely deplored. They were suggested to his mind by the desire to convert a non-Catholic friend. We very willingly publish these original thoughts, as well for their intrinsic merit as for an example of what is done by some, and might be done by many more of our young Catholic laymen, while pursuing their ordinary avocations, and without any special training in theology or metaphysics. The glow and enthusiasm that mark their closing sentences are indicative of the habit of thought of one whose delicate health made him a constant and exact thinker on religious subjects,—EDITOR.]

A LL men desire happiness.

Happiness is the satisfaction of all desires. But natural desires are opposed by natural powers, thus: All men naturally desire to know, but no man can explicitly apprehend all knowledge, and no share of explicit knowledge yields satisfaction of the desire to know; therefore,

Happiness in the natural order is impossible.

It is true, exceptions may be taken to this line of argument. A man's pleasure in the natural order may be relatively so, great, his desires may be so far satisfied, that the abstract happiness which is an impossibility ceases to be of practical value. But what has the world to do with those few of its people who batten on the wreckage of the majority's lost ventures; who, sheltered in sunny estuaries, live in a perpetual summer of human affection and well ordered sensuousness? But, again, there are multitudes who would jest at the inexorable demonstration of the impossibility of human happiness; for are not these multitudes happy in their lives of toil and triumphant ignorance, that crass and invincible enmity to intellectual light which yields a sombre enjoyment of its own? But does the world concern itself more about this last than about the first class of exceptions to the universal fact? This universal principle, or fact, points very plainly to the superior fact that man is destined for a supernatural end, of which happiness is necessarily understood; unless it may be said that our desire for happiness and, by implication, all our other natural desires, are valueless as motives for sustained action-for a desire destined never to be gratified were an intolerable absurdity for a rational

Herein we are not making universality of extent or number, but universality of the integral qualities of human nature a test of truth. Most assuredly, if humanity is merely a so-called higher development of animal life there should not arise in the affections of men or abide in their thoughts any conception of a higher destiny, except in degree, than may be anticipated by an elephant or a dog, and unless elephants and dogs somehow think of a future state of gratification superior to those they now enjoy, our thoughts of heaven are peculiar to mankind. At any rate, they are peculiar, inasmuch as they can only be relative in their completeness to ourselves, in virtue of our peculiar superiority over animals. But there is better testimony for the fact of our eternal destiny, in a deeper search of our nature and the conditions of our life.

No one will deny we are creatures of social instincts, and no one will deny that, without law extraneous to instinct, society would be a brutal herding, fatal to all but the strongest, and fatal to such blissful conditions as the family and the State. Expediency would no more avail than it does in Central Africa where it is unknown; such rude society as there exists being maintained as much by the laws of so-called superstitious origin as by any supposable knowledge of the expediency of hygiene or mercy, and expediency, at any rate, means nothing if its development were not sumptuary laws, for pickaninnies are not born with a fully thought-out scheme of action founded on motives of expediency. A child is born with aggressive instincts, the embryonic passions of the man, and child and man alike are forced to bend the will to do or not to do in obedience to law. In so far as law is the result of mere expediency, it is variable; for what is expedient under certain conditions is not under others. But there are invariable laws, irrelative and superior to expediency, unless life should not always be respected, even when murder can be done with impunity; unless some recondite argument from expediency. justifies Orestes, and Othello, or Francesca and Paolo. We can now see clearly that men are actuated by contrary motives; innate passions, disordered and affronting, are kept in check, not by any inborn counter-power, nor by reason's consideration of temporal exigencies, but by consience, a higher reasoning, whereby we recognize laws superior to natural conditions, laws which you cannot attack without advocating anarchy. You must attack the heaven whence come the highest laws of life, if you wish to complete the circle of negation back to the starting point, where again you will be confronted with the undeniable affirmation that man is destined for a supernatural end.

[&]quot;Man liveth not by bread alone, but by every word that proceedeth out of the mouth of God."—S. Matthew, iv., 4.

[&]quot;The question is not about your gold and silver, not your lands

or farms, not even your bodily health is in peril, but we address your souls about obtaining eternal life and fleeing eternal death. Rouse yourselves therefore. . . . You see it all, and know it, and groan over it; yet God sees that there is nothing to detain you in so pestiferous and sacrilegious a separation, if you will but overcome your carnal affection, for the obtaining the spiritural kingdom, and shake off the fear of wounding friendships, which will avail nothing in God's judgment, in order to escape eternal punishment. Go think over the matter, consider what can be said in answer. No one blots out from heaven the ordinance of God, no one blots out from earth the Church of God; He hath promised; she hath filled the whole world."—St. Augustine, quoted by Cardinal Newman in the "Essay on the Development of Christian Doctrine."

The skeptic's position is necessarily a position of defence, because it does not appeal to him as wholly true, nor as being of the nature of essential truth as far as it may be true at all. The fact of his dissatisfaction with it is one of the first notes of the falsity of his philosophy, as may be shown by the rationalist's own criterion of the facts of human nature and life. Time and again have the childhood developments of human nature been studied and appealed to, and no truth is more striking than that the immature mind is singularly accurate in its perception of truth, discriminating by an apparently instinctive process,—using instinctive to indicate a rational action which defies analysis,—and co-ordinate with this is an equally singular trustfulness which enables children to accept and in a true measure understand, without difficulty, incomprehensible truths offered in good faith. Childhood, in virtue of baptismal and even natural innocence, enjoys better in immaturity that divine gift of perfectly assimilating humanity's proper nutriment of truth, than right-minded men whose powers are impeded. overlaid, and contradicted by their attachment to evil. This appeal is made to an universal phenomenon, superior to the exceptions of stupid, weak, or vicious children, who are sufficiently rare. Some learned philosopher has said, "man consists in truth," and so far is this a fact, that nothing but truth pervading all his intellectual life will make him conscious that he is, in the sense of knowing his existence in a satisfactory manner; wherefore it may be said of a man in search of truth that he seeks himself.

I ought not, my dear friend, to have to say to you that God is truth itself; that "man consists in truth" in the sense that he partakes of the qualities of divinity; and that, therefore, in proving that God exists, I prove to you the only reason that you yourself exist.

We know as God the Father of the universe. Coexistent and coeternal with the Father is His only-begotten Son, and from them proceeds, and of the nature of their eternity has always been, the Holy Ghost, and these three distinct Persons are one God. cept as we know this Holy Trinity we do not fully know God, and as often as we use the word God we mean the one true God, Father, Son, and Holy Ghost. Thus you shall recognize the identity of God. Of His attributes, we will enlarge only on that which appeals to our intelligence as the most striking proof of His existence. God is the Father of the universe, except that the word father inadequately signifies that comprehensive and sufficient attribute whereby creation is simply an act of willing. He said: "Let there be light: and there was light." "He that sendeth forth light and it goeth; and hath called it, and it obeyed Him with trembling. And the stars have given light in their watches and rejoiced. They were called and they said: Here we are; and with cheerfulness they have shined forth to Him that made them."

Since it appeals to our intelligence, gratifying us in a manner different from any sensitive pleasure, like sunlight or the taste of pleasant fruits, the world around gives ample evidence that it was created by an intelligent being. The theory of spontaneous evolution advanced by the positivist scientists destroys itself, because their method precludes an appeal to any criterion except observation and experience, and observation and experience teach nothing as being more primitively causal than matter and mechanical force, of neither of which things can it be shown that they are or can be self-existent. Now, to a self-existent essence only can be ascribed the origin of all things. Matter and motion are not self-existent. because one without the other would be meaningless; as a force is no force if there be nothing for it to act upon, and matter is nothing if it be not acted on by force; nor could force come out of matter, or vice versa, because energy-force and non-energy-matter are contradictory terms.

Thus it is shown that matter and motion are not self-existent, and if they are not self-existent they are not eternal, for self-existence and eternity are interdependent terms. We need not care that "countless eons of time" have transpired since matter and motion came from God. If always He chose to create, they are practically eternal as to posterior duration, but not eternal in any potential sense. It is attempted by some men to ascribe the origin of things to the laws governing matter and motion, as gravitation. Such a law as gravitation could only be imagined to prevail as being peculiarly fitted to matter and motion as the things to be governed by it; and, therefore, oversetting the fallacy that matter

and motion are self-existent, also oversets the fallacious appeal to natural law as the eternal origin of things. Moreover, in the application of law in the concrete we find an assemblage of laws, and, confining our thought to natural law, each separate law appears, evidently, the result of another, and no one is so universal as to be the cause of all the rest and the cause of itself also; but, all acting co ordinately and interdependently, it follows that natural law is the effect of a higher cause than it is itself. This holds of all secondary causes in our explicit knowledge that they are also effects, and this proves the existence of the First Cause outside of and superior to all other causes. Moreover, the First Cause must be different from all other causes, inasmuch as it exists of itself, while they as being effects as well as causes must exist dependently on the First Cause; exist dependently in the sense that the omnipotent, omniscient, eternal, and infinite Being sustains, as of necessity, by a function of His supreme life, every atom of secondary existence. Without the First Cause there were nothing; not organic nor inorganic matter; not motion nor the void-but what words can represent the annihilation which is not and cannot be thought, even as an hypothesis?

The First Cause is supreme, and therefore cannot be limited in its nature by the subordinate causes which are the effects of it. We know the First Cause to be God, because of it alone can be affirmed supreme attributes, as self-existence, which implies personality, and personality implying intelligence and will, wisdom and love, and all things worthy of God.

Personality is that perfection of an individual being of an intelligent nature whereby it is constituted and distinguished from all others, and we cannot think of God except as a personal Being, because, as the First Cause supreme, He exists alone, separate, and unequalled.

There is a three-fold action in the operation of our human intellect; the single personality has a multiple life, and, as the learned Father Walworth has explained, understanding of this leads by a true induction to our understanding of the Holy Trinity of God, as far as it is needful for us to understand the mystery. The operations of intelligence are of three kinds. We think a thought, and view it as extraneous to the womb of intelligence whence it came, and, conversely, thought turns about and questions the source of its being, and, at once, between the fecund intelligence and its child of thought there is glowing a common affection,—a distinct and integral action of the intellect. Our thoughts become, as it were, corporate parts of our intellectual life. They are the happy brood of memory, and the love of the mind for its offspring, as well as for the children of its adoption, makes up

our habit of thought, itself as capable of objective consideration and analysis as its subject-matter, or as the thinking essence, the passive intellect.

Personality is not contradicted by this analysis of its life, because we cannot think of personality except as a living principle, and life means an internal action of of the essence of the living thing; but action implies powers and objects, whence we at once understand the three-fold action of the soul to be as absolutely elementary an idea, as divinely perfect in its composition as is the triangle, the symbol of it, and the unit of statical perfection in mechanics. While the three-fold action of the soul is not a perfect trinity of persons, since, because of our finiteness, the begotten thought is begotten in time successively as partial thoughts, and, therefore, is not coequal with the passive substance whence it comes, and the same inferiority holds of our will, yet we must understand a coequal personality of the Trinity of God as of the essence of life in Him.

There is the living Father; and the only begotten Word, the Son; and, proceeding from the Father and the Son, is the Divine Will, the eternal love, the Holy Ghost; and all three, Father, Son and Holy Ghost of the eternity of God's personality must be coequal in all the dignities of that personality and are infinite, eternal and self-subsisting; distinct Persons, in the same order of being one of the other, and yet inseparably One in the unity of the Supreme Nature, of which our own is but a faint image, but of which the same principle of life must necessarily hold.

Of the incomprehensibly intimate union of the Persons of the Holy Trinity we can only understand that the life of the Father is interchangeably in the Son and in the Holy Ghost, and the life of them in Him and in one another, a reciprocal action of being not necessarily repugnant to the idea of distinct personalities. And all this is clear in the light of the Eternity of God. God is Eternal, from all eternity has the Son been begotten and the Holy Ghost proceeded, and to their being distinct Persons it cannot be objected, that, because of their absolute personality, in them should be developed a further subdivision of life powers, such as they are of the Trinity of God; for there would then have to be three separate eternities and infinities, which is absurd. Yet again, for the Father and the Son and the Holy Ghost not to be Persons, reciprocally sharing in and themselves being of the triune essence of Deity, of one or of the other must inferiority be supposed, which is also absurd because, except as each and all are equally from eternity they are not of God, and if they are not all equally of God. God is not. Now, the Trinity is the secret of God's self-existence. He needs not us, but how do we need not Him?

We must understand of humanity's necessary inferiority as a creation, that there are certain accidents marking that inferiority, which cannot attach to God. He is neither finite nor material, because finiteness and materiality are among the peculiar marks of creatures as contradistinguished from the Creator. The lesser facts of life in which these marks of our inferiority are manifested are simply developed by action of the quality of growth, one of the highest gifts in the order of creation and which reaches directly back to the Creator; for by growth we behold the expanding of innumerable beauties previously passive in the condition of the creature's power of fecundation out of which are born buds and blossoms and seeds which shall in turn produce new life-or perish, at the will alone of the Supreme Life-giver, God. The beauty of all spiritual creations and material things, from the luminous splendor of a seraph to the tender loveliness of the most modest wayside flower, comes from God; but, in the different orders of creation, this beauty becomes a fainter and fainter reflection of His glory, as it passes from angels to men and from men to the lower orders of material things, matter being the peculiar limitation of the lower order of created entities.

The skeptic's appeal to conditions of natural law as answerable for the failure of fecundation is sound enough in the sense, that through these conditions is the will of God expressed. Unless natural law is self-sustaining, it has no moral value, and as expression of God's will—a will of which we can only think as being arbitrarily superior to all things except principles of moral right, as truth or justice—natural law is variable with an eccentricity more unsearchable than the orbit of a comet, or the immeasurable intensity of storms.

To the ordinary physiologist the idea of the resurrection of the body is most repugnant, on account of his common-sense understanding of natural law, an understanding based on experimental data whose first development is the theory of invariable and unalterable principles of action or construction in the operations of organic life and chemical phenomena. This theory is sound enough in the abstract, supposing an explicit understanding of the order of precedence of specific laws among themselves and their subordination severally and collectively to laws of more universal application. Herein lies the secret of skepticism among physicians. They implicitly, sometimes explicitly, maintain, that, because they have so deep and accurate a knowledge of specific laws, therefore, all laws are explicitly knowable by men, and that, since they cannot weigh and note experimentally the superior law of physics which vindicates the apparent paradox of the resurrection over against the sensible phenomena of death and decomposition, therefore, such a law is an absurd hypothesis.

At the resurrection our bodies will rise in the dignity of superior conditions which are sufficiently comprehensible when we examine, as deeply as we may, into the elements of matter. For instance, the resurrected body will be so glorified that, at will, the immortal man can place himself here or there, even as our Lord appeared among the twelve when the doors of the room were closed. Knowing as we do, that the most elementary conditions of matter which we can reach are gaseous, and not troubling ourselves to search more deeply, we can understand clearly enough a superior condition of our bodies, a gaseous condition mayhap, in virtue of which no more ponderable substance than like gases could interrupt the passage of the immortal being. It matters not how far distant from a divine explanation may be this crude suggestion of supernatural possibilities, since it is accurate and refined enough to answer the student of physics, who, certainly, can offer no proof against the nature and destiny of man as we know these things through the testimony of reason and holy revelation. Reason is sufficient to satisfy us of the possibility of the resurrection, even in the light of our present small attainment in physical knowledge, and only the most obtuse materialist may refuse the argument from personality. Surely, if our personality is not a fiction, unless body and soul united are not absolutely corrupt and every function of physical life is, therefore, bad in itself, surely our personality holds of the body as well as of the soul; and, again, therefore, unless the soul is not immortal, the body of which it so holds in the essence of personality, is raised also to an immortal state, and unavoidably this common personality defends its subject-matter through every vicissitude of time, or place, or chemical transmutation.

Until the wisdom of God is made plain to us in His judgment, these mysteries must be taken at His word, and, if he cannot disprove the historical tradition of that Word, the proudest scientist must cheerfully bow to the testimony of the very Truth itself.

It cannot be argued, that, since virtually and genetically all our qualities of being are contained in God as the First Cause, therefore, the evil in us must come from God, because, just as there are dispositions of us which are peculiar to us because of our defectiveness as creatures, so there are others which are a consequence of our first parents having chosen, of their free will, a state of moral being necessarily partaking of evil.

It is necessary to explain here the difference between moral evil and material evil, or what we may call active and passive evil. It is evident that evil as a passive quality must always be as a contrary to good, since we cannot imagine an abstract quality without its contrary; neither good without evil, softness without hardness,

sweetness without bitterness, nor light without darkness—in short, no affirmative without a negative.

Now, this is the essential difference between good and evil; evil of its nature is negative, incapable of life, of growth, of changing phases, except what it borrows of intensity from the fatal marriage between the "body of its death" and the perverse human will; whereas, on the contrary, "good" and "life" are synonymous. Good is of the nature of God; a quality presupposing activity, life, growth, positive energy; a quality capable of prevailing infinitely in virtue of its being of the Nature of God-contrarily to evil which, except as a negative possibility, prevails only in the action of those poor souls who have embraced it. Evil does not hold of our nature as it comes from God, and to explain the marks of evil in us we must explain the origin of moral evil itself. That evil cannot come from God is plain since He is Goodness Itself, and as good is the contrary of evil, the existence of one implies absence of the other, as a thing cannot be and not be at the same time.

Our existence is sufficient answer to the question, "Why did God create us," because our existence is good, a positive good; our happiness is positively good; and the immediate sources of our happiness—our well-ordered love of our fellows and of self, our love of heaven and earth, and in themselves every form of life therein, all is good, and this fact of good positively knowable sufficiently vindicates the wisdom of creation as for the glory of the Creator, unless you say it is a better good that good shall not exist.

The will of God is supreme; of itself the implicit law of the universe, since it is the source of all law. Law holds peculiarly of will, and we, therefore, understand that moral evil had its origin in the rebellion of created wills against the supreme will of the Creator.

It may not be supposed that created wills might not have refrained from rebelling against God, nor can we imagine that it were better if God had not created will capable of rebelling, because we cannot think a greater good than the good of free will, or, rather, there is no greater good known in this life than the good of free will.

We are wont to speak of the imperfection of the world around and of human nature, meaning by imperfection, not the existence of evil, but the relatively meagre endowment of created things with qualities of goodness; that is, it is a defect in a man to be born blind, or that the highest intelligence brings forth its brood of noble thoughts only with labor and slowly. But God alone is infinite and, therefore, perfect beyond compare, and He can always

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add new qualities of goodness to His works from the exhaustless store of His own goodness and, as a thing which can be made more good is not perfect, it follows that His creations must always be imperfect in whatever degree they may please Him.

It is the last ditch of the retreating questioner of the established order of things to say there is no evil; that what appears to be evil is not so; nor sorrow, nor disease, nor death, nor sin are aught but phases of a good we cannot fathom. This is specious, but the test of the inductive method will show its fallacy. We have shown how evil is the necessary contrary of good, and disease and death are phases of passive evil energized by its fatal union with a corrupt human will.

We have said that the essence of moral evil is disobedience of law: that is, evil holds of the will, except as it is the passive negation of good. Now, unless humanity is so constituted that it neither loves nor hates, or, in other words, unless it is not of the essence of will to be affected for or against contrary things, there can be no moral evil. But what are the facts? Ouestion your own heart and, seeking not to shelter yourself in subterfuges, reflect upon its true testimony to your loves and hates. You, who respect facts only, should give a just, ave, a generous hearing to the witness of your own will-a fact of dignity. If you will not do one thing nor another, if even to survive or perish is truly indifferent to you; if to live in the sunlight of nobility and purity rather than in the night of intellectual and sensual infamy is a choice you are careless of making; if to see honor and virtue contemned and falsehood and lust triumphant arouses not your indignation; if to see the human race recede to the gloomy state of savagery were a spectacle of no abhorrence in your eyes, then, perhaps, not only is there no evil, but also there is no good, or, what is more likely, you are a limb of Satan. This is certainly inductive; this is certainly appealing to self-evident and incontrovertible fact, and, unless you wish to be party to the nihilist's farce of denying the nature of things, you cannot long indulge the absurd optimism of supposing there is no evil. Certainly, it might have pleased God to have refrained from creating beings of free will and thus prevented moral evil and the necessity for its everlasting punishment, but what does such an hypothesis avail us? Certainly, it has not pleased Him to act in this way, and it may be said here, once for all, that the human mind is guilty of no more heinous absurdity than this hypothetical questioning of the wisdom of God's providence in the spirit of a man making these idle hypotheses a test for his acceptance or rejection of the body of Faith.

Examine the facts of Providence; prove them; be as inductive as you will, but when your thought at last confronts itself with the awful presence of the Omnipotent God, then bow and tremble. Tremble at the appalling danger of lifting—as did Lucifer—a proud front against the Eternal; of presuming to measure and weigh the inscrutable wisdom of Him out of whose infinite goodness the goodness of your life has come. That He has made you, gifted you with the exalted faculty of knowing him and hoping for heaven, plainly imposes a responsibility upon you of obeying Him—of loving Him. Spake the Redeemer: "Before Abraham was, I am." We partake of the immortality of God in being created for everlasting life, and out of this co-ordinate eternity of being can come nothing but eternal results.

The facts of life cannot be evaded, and a man's life of thought is as real as his life of action. Vague and incoherent are the broodings of the illiterate toiler; crystalline and acutely logical are the high speculations of the scholar; but both one and the other have common thoughts and labor with common mysteries. The numberless grains of his harvest teach the same lesson to the peasant as the telescope's myriad revelations teach to the scientist. Infinity! Eternity! Blot out human intelligence and then you can say the thoughts these words signify are not realities. God creates an immortal soul, and it cannot be imagined that God creates these souls as a planet throws off meteoric dust, because nothing is except God is; nothing exists except God sustains it, and therefore, to destroy the soul as a meteor is destroyed, you must destroy God. Once the soul is created by God, in the infinite function of His life is its life sustained, and, moreover, in the fact of personality is found the individual soul's inviolability of life; for unless life, generically speaking, can cease as an eternal fact, the life of the individual soul cannot cease as an eternal fact.

Religious beliefs are developments of natural facts, or, secondarily, are developments in turn of specific from generic beliefs, and revelation is the testimony of divine authority to truths whose natural basis is too deep for common knowledge. But also, of course, revelation is divine testimony to facts in the supernatural order which have what we may call a natural relation to the evident facts of human life.

Thus, divine revelation confirms the doctrine of hell which, philosophically considered, is the unavoidable development of our knowledge of the soul's immortality and of our acknowledged responsibility before the law.

A so-called future probation is the only escape from the inexorable logic of facts, but the hypothesis of a future probation cannot stand before its own corollary, that, if there is a future probation, this life is no probation at all. God is perfect, and his works are perfect in themselves, and man's intelligence is proportioned to his responsibilities, or else God is a haphazard experimenter and man is the luckless toy of accidental conditions. You cannot impugn the unembarrassed sovereignty of the individual will. That God may surround that will with conditions of life attractive or repellent to the individual's desires is a fact of an entirely different order, and alters not the responsibility of personal choice. Moreover, God "desires not the death of a sinner," and virtue is never repellent to conscience.

They are doubtful servants of the law who talk about the inhumanity of hell; who say it is absurd that God, the God of love and goodness itself, should permit an eternity of torment for human souls. But hell is the work of those who people it. It is no more the work of God or the desire of God than heaven is the work of man. Have the damned not chosen to be damned? Are they not in hell because they hate the God who loved them, and is not the eternity of hell the eternity of their hatred, and can their hatred be aught else than eternal? In this life they knew God, who, in the voice of conscience, called them to Himself. Plainly, they knew that death was the gateway to eternity, an eternity of happy humility before God or of vain pride against Him. Coldly, calmly, they resisted His appeals-and died. In them evil lives as an active principle, ever warring against good, and you can no more love them than you can love the criminal who commences his hell on the scaffold and dies blaspheming God and cursing his judges, or than you can love the evil itself which they have chosen as their everlasting portion. True, hell is the vengeance of God inasmuch as it is when He withdraws Himself from the reprobate that damnation is accomplished, and God and the sinner alone know that frightful hour of final unrepentance.

This life were a very poor comedy if it does not comprehend the responsibility of eternal life or death, and is not our only opportunity for accepting or rejecting that good for whose glory we are created. If this life were not our only opportunity we should not be given light sufficient to be saved. But the saints testify to the abundant and more than sufficient knowledge and help God gives to them who choose Him with confidence and love. If the Eternal Son had never risen from the dead, having lived to example universally the different trials all must undergo to win heaven, having died to take away the sins of the world, then might we turn aside and invent a theory of transmigration of souls to explain the facts of life.

Thus we see how God is the beginning and end of all things.

Knowing Him as the First Cause is the supreme and sufficient proof of His existence. Clearly understood, the argument is irrefragibly convincing. Flawless and completely spherical, its unity and symmetry fitly symbolize the Eternal Being of whom it is the witness to our intelligence.

Let us attempt to describe a so-called scientific and rational opponent of dogmatic religion. He is a man who has deeply questioned his own nature, sounded his affections, his moral instincts, and his carnal impulses. He has analyzed the phenomena of his mental action by an appeal to the involuntary functions of his physical life, questioning digestion, and heart action, and nerve He has compared his nature with that of lower orders, from mollusks to elephants, and grimly studied how he is the prev to invisible bacteria. He has applied an intense scrutiny to his social condition, weighing his ethical superiority over animals and savage tribes. And he has even deigned to call upon the seas of history to deliver up their dead that he might scan in the broken skeletons of primeval thought some evidence of a sound scientific reasoning by induction. He fain would rest at times from the interminable labor of passing from primary to secondary and from secondary to tertiary, on and on through the limitless range of the co-ordinate terms of material life whose comparison is ever becoming more difficult by his discovery of unexpected factors of an integral importance, lower in the scale than the point reached, which oblige a weary turning back. Not even in the person of a Herbert Spencer has he found aught evidenced in the study of compelling truths except an "implicit trust that the great evolving movement of things is towards the higher and better," to quote words in the introduction to that writer's "Data of Ethics" Alack, and well-a-day! And has all this mighty inductive gestation and labor of the mountainous scientific method brought forth nothing but a vague "implicit trust?" And does the "implicit trust" satisfy him? At its birth have his labors ceased? No. He lays aside his books, pushes away his microscope, forgets his nerves, forgets friends and all the world, ave, forgets himself, a solitary, throbbing entity in a limitless expanse of thought, as the same old questions present themselves: Who is God; what is God? This is no sentimental appeal to a fancied consciousness of the infinite as of the nature of us. A mere "implicit trust" is negative, and truth is not if it be else than a positive quality, and unless it be that the contrary of truth will satisfy the mind, it naturally follows. that no order of thought can yield satisfaction unless it leads to God, who is the very truth. A man searches for truth in physical investigation. The possession of truth only can satisfy him, but,

if he finds it, he will be consciously satisfied. At no time whilst he searches is he more than partially, and even at the end of his search he is not wholly satisfied, or, as far as satisfaction is an absolute term, he is not satisfied at all, and, therefore, he has not found truth. Does it follow from this that truth is not to be found in the study of physics? No. Search with faith and the study of all things will make truth manifest. But faith is rejected by our scientific thinker, and faith comes by a still higher element which this same scientist overlooks, ignores, or what you will. What is this element? It is the inward power which still impelled him when he was aweary, goading him with those awful questions: Who is God? what is God? This inward power is conscience, the inspired intellect, the mind re-energized by the grace of God, as I have elsewhere attempted to metaphysically explain. Faith is commanded because we know it to be a divine inspiration, and it is possible for the free will of man to reject it, hence as grace it comes as the voice of supreme authority. Now, faith is simply the act and the duty of believing the reality of things only remotely knowable to us through evidences in the natural order of our comprehension. Faith is not difficult. Indeed, it is harder to believe the contrary arguments than to believe the proofs we have of God's existence,-proofs all in the order of our understanding, and clearly pointing to a realm of being and power beyond it. Our reason makes us know explicitly that nothing but good is proposed for our acceptance on faith. Reject faith and then look for destruction, for if the mind contemns its own judgments there is no court it will respect. True, a man may be a partial disbeliever, limiting his faith by his own power of analysis; but such a man is very liable to be so busy with the work of his mind, that he does not attempt to limit or define his implicit faith, a gift which, purely of God's goodness, may save many men in spite of themselves. There is hope for the man who neglects the culture of faith, but there is much to fear for him who deliberately rejects a certain testimony and does not hesitate to accept the logical ruin of all revealed law which must follow that rejection. By the deliberate disobedience of a divine inspiration, evil gains a lodgment in the soul, as a man becomes possessed of a devil, and, by the natural law of affinities, evil seeks evil and the man may become the den of any sort of sin that specially fits his temperament, and he is a blasphemer, or an anarchist, or an adulterer, or a murderer, or one of those wretched souls whose curse is indifferentism to all positive thought or feeling, whose moral and intellectual life is automatic, or as though every faculty had been seared by his horrid sin, and an all-pervading blindness encompassed his being. And it may not be urged that, because some men who are without

faith lead good private and public lives, therefore faith is not necessary to the conservation of society and the individual. Not only are a few isolated cases ineffectual to disprove an universal principle, but, besides, that principle is proven by the very constitution of things to be a practical necessity in the life of man. knowledge of God is a knowledge requiring reiterated assertion, and reiterated proof by the reason's appeal to the essential idea of a First Cause. Could we eliminate the idea of a First Cause, we should at once eliminate law in the abstract, and, consequently, that concrete body of laws which keeps men from all being criminals and societies from being torn apart by the substitution of might for right and self-interest for justice. Therefore, as far as men know God by faith, looking through faith to Him as being the source of law, it is evident that faith is necessary to the conservation of the individual and of society. It has been shown that free will means independence of law; that is, the law of faith is not a coercive expression of the will of God, as is physical death, and because man is free to disobey it, and yet live, if he pleases, in obedience to subordinate laws of daily life, this is no contradiction of the duty of obeying faith. And, moreover, upon the recognition of this supernatural duty of life clearly depends our right and title, as far as through obedience we may have a right and title, to a future existence, of our hope of which faith is our witness before God, and it plainly follows that, if we reject faith in the future life, we ought by implication to reject faith in the life we lead here, because our knowledge of the future life, except as it is revealed, comes by our knowledge of what constitutes the reality of our present life,—a life no less mysterious to the agnostic than it is to the Christian.

Who is God? What is God? Because you can think the possibility of Him, because you understand the terms describing Him, you know Him by your knowledge of yourself. Your power of mentally conceiving that He may be existent at once places your questioning of His existence in a position of defence, and this is all, perhaps, that we can gain for theism by the argument from consciousness. But it is so much, that we can now advance without fear of the mists of metaphysics which have arisen from the morass of skepticism to veil the sun of Truth from the eyes of men.

It is evident to all men that, however mysterious in themselves and in their action are the powers of the mind, there are certain easily understood physical phenomena which may be used as a basis for reasoning, no less sound because its generalizations while implicitly indicating, yet attempt not to array explicitly the profoundest and most exalted facts of metaphysics. Without penetrating too rashly into the holy mysteries of the soul, it is necessary for us to show what of the soul is the mind and what of the mind are the thinking powers evident to us. Because there are powers and qualities of our bodies of which the most learned physicians know only by phenomena, whose laws of action can be but faintly traced and followed, it is understandable that there are powers and qualities of mind unknown to us except through phenomena, and in the unconscious vitality of which men live.

"Thou livest in a world of signs and types,
The presentations of most holy truths,"

but, forget not, O student of the Truth, that thy knowledge can come only by thy reverence for these signs and types; by the deliberate understanding that these signs and types in virtue of what they represent are very real for us; that their reality for this episode of time has all the value of the eternal reality which is to come, because they are the witnesses of it, and, yet, except as they are witnesses of the eternal reality, these signs and types indeed are valueless.

Only force can beget force. We are told that, before we can know the wind is blowing, it must strike upon our cheeks and the nerves of the face will send a message to the brain, or to a special part of it, reporting the rude vibration of the air, and that part of the brain, calling a convention, presents to the assembled nerve delegates from the other lobes the data sent by the facial nerves, and the result is a thought that the wind is blowing. Now, it is of the function of reason to recognize the distinction between cause and effect, and, after the resolution of the simple cognition, that the wind is blowing, is passed, the convention of mental powers at once asks in open session what caused the wind to blow and, thus, with unerring rapidity, the mind reaches back to the idea of a First Cause. Through this power of passing from the rudimentary cognitions, of which we become possessed through the senses, to abstract ideas, we know that abstractions must represent realities of a higher order than mind and matter. stractions do not represent such realities, then simple cognitions do not represent realities, because abstract ideas are as real to the mind as simple cognitions and a man is as certainly led to positive actions by justice or honesty, as he is led by a simple cognition when he goes in out of the rain. If a simple cognition lay inert in the mind, like a jewel in a casket, devoid of the active principle of assimilation and growth, then we might say that simple cognitions are the only realities. But, without forgetting the inexorable truth that all knowledge comes only through simple cognitions,

yet, the power of the mind working with simple cognitions to reach above them to abstractions is sufficient testimony to the existence of some hidden principle which in turn is subject to a force, immaterial and superior to the mechanical force which through our senses awakens the activity of the imagination. If the action of the imagination is subject to the action of exterior material influences through the medium of the senses, and, if upon this initial action of the imagination depends the action of the reason then, for imagination and reason to lay hold of any but material subjects of thought, it follows that they must be the powers of a higher principle living through them only as far as the existence of us in this world depends upon the things which are of this world. This does not lead up to the idea of the soul, because we are dealing with the question of thought only, and, therefore, we know that imagination and reason are only powers or exponents of the idea of intellect, which overtops them, and of which even memory is only the humble servant and will the executive ally, and, moreover, all these being the only active spiritual principles of which we are conscious, it is at once understandable that the reality of the mind to which they refer must be passive—the passive intellect. The passive intellect is what we understand of the mind as an attribute of the soul, and we know the soul is all spiritual, subject to spiritual influences and, therefore, the passive intellect is subject to spiritual influences and towards spirituals and as governing its own powers exerts a reactive energy both ways, since both spiritual ideas and cognitions of material realities are subject-matter for the mind's synthetic action. Wherefore, the passive intellect is not passive in the sense of being a Dead Sea of thought amidst whose idly vibrating waves pearls of reason and sapphires of imagination are alike dissolved in a merciless oblivion. What follows? We have shown the imagination and reason to be subordinate to the passive intellect as any part or power of the body is subordinate to the body, and, as the relative energy of any part or power of the body depends upon the general energy of the body, so the relative energy of the imagination and reason as powers of the passive intellect depend upon the general energy of the passive intellect. Thus the activity of reason in assimilating the simple cognitions presented by the imaginations, depends upon the material vigor of the passive intellect, and, as this activity of the reason is greater or less, so is a man more or less spiritual, i.e., superanimal, the mental life of animals being simply the continuous apprehension of sterile cognitions. Now we are led to the question,—"Whence comes its vitality and energy to the passive intellect?" There can be no answer, except we say, "From God."

This is what Christians mean by inspiration.

Of course we know, besides inspiration, a different power of life in virtue of God's original endowment of human nature with the power of thought, and, in human nature itself, and the world around, His provision of the subject-matter for thought; and the mind thus constituted requires no replenishing with divine energy in order to fulfil its temporal destiny, but, of its created nature, lives, moves, and has its being continuously. But this dignity of natural endowment is limited and impaired by sin; wherefore, we understand that we must be the objects of immediate inspiration; the pouring out upon the child of His love, of God's free and unmeritable gift of goodness, in virtue of which we, who are "born children of wrath," are made capable of thoughts of humility, of obedience, of charity, and are given knowledge and wisdom concerning immaterial things, in short, are enabled to know, to think about, to love, honor, and obey the true God from whose blessed vision Adam and all mankind were banished. But, though banished as an abiding and unfailing enlightenment, as a gift so exalted that in virtue of it man was worthy of the friendship of God, yet, since the passive goodness of our nature was not expelled by the Fall, and since our free will did not irrevocably choose evil. therefore, we still are capable of receiving the power of divine grace, and of profiting by it, if we elect to correspond with, instead of disobeying, its promptings. We should not presume to question the measure of this gift as bestowed upon one or another, because God gives Himself at His will; but from the facts of life we know the truth of what he says: "I love them that love Me, and in the early morning watch for Me."

If we thus know God's will to be the impelling energy of all good thoughts, outside of and above the natural thoughts which are good as of the inferior good which still holds of humanity, does it not follow that He must inspire evil thoughts, else, whence come evil thoughts? As we have seen, the essence of moral evil is disobedience of law, of God's will: that is, evil is a negation, not an active, self-existent principle, as is good, but, coming about by the free will of man denying the inspiration of God, which must, of His nature, always be good. Thus, we have two forces influencing the spiritual life—the inspiration of God, and the free will of man, and evil is the opposition of the latter to the former. Certainly, action must be progressive or retrogressive. of the mind cannot be thought to be an invariable phenomenon, like a diamond's reflection of light, or the unfluctuating intensity of a seraph's ecstacy before the Throne. This life on earth has for its first element an unceasing struggle of the soul towards spiritual perfection, or by its fatal choice of evil a horrid haste from God, whose mercy may encompass the sinner even to the gates of death, when at last the choice must be made between eternal good or eternal evil. If he will a man may so reject grace that he sinks to a condition of intellectual torpor as he follows a career of sensuality; or, he may engage in a restless, hopeless conflict against the testimony of conscience, scorning in pride the sacredness of natural and revealed law. But if he is faithful, he will fulfil the destiny allotted him by divine goodness and live truly, in the sense of advancing, from generation to generation, of races, and from day to day of the individual's life, to a keener, ever deeper apprehension and understanding of the illimitable attributes of God, as in this temporal existence they surround us, dimly reflected in the effulgent skies, the happy earth and, above all, in the mysterious dignities of our own nature, the special object of His infinite care.

Religion is love and obedience of law, but, as we cannot be expected to love and obey a law of which we are ignorant, it follows that religion holds primarily of knowledge. It is certainly no abstruse or finely spun principle—though fine spinning is not contrary to the spirit of truth—that since knowledge is the basis of religion, and we are naturally endowed with the powers of acquiring knowledge, therefore a man's religiousness depends finally upon his good will to acquire knowledge and upon his good will to correspond with the obligations imposed by the knowledge he acquires. But, moreover, knowledge is manifold, and no man is capable of acquiring all knowledge. Now, since good will, primarily, and knowledge, secondarily, are the natural terms controlling the idea of salvation to a future life of happiness, the reason and object of religion, what must we infer as of the essence of religion as it holds of different souls? We must infer that since there is a difference in degree of good will between different men, and since our understandings are greater or less in capacity for knowledge, therefore, in the first place, there are degrees, not of salvation, which is an incomparable idea, but of the gifts of salvation, and, in the second place, either chance controls the extent of the powers of the different men to acquire knowledge, or else the individual's powers are the expression of a supreme will, and this must be; God is, and His is the Supreme Will, the existence of which controverts the idea of chance, the contrary of will.

Now, we cannot think of the Will of God unless as the Source of Law; and it is an universal will, and law, therefore, is universal, which shows us that law, generically, and laws specifically speaking, must control our knowledge of truth. It is of the nature of truth that truths are of greater or less importance; that is, one

truth may implicitly contain and of the order of its importance control other truths subordinate to it, and all truths, as of the whole body of truth must act co-ordinately and interdependently. being so, it is evident that, to a right understanding of truth, truths should be known, as one holds of another, and the majestic sequence of lesser truths to greater must be scientifically fixed in order that no integral factor shall be dropped by reason of a faulty knowledge of its interdependence with other truths. This is an analysis of the principle of dogma; a dogma being simply a truth of an importance so great that a right understanding of subordinate and co-ordinate truths affecting the faith and morals of the people is dependent upon it, wherefore it is solemnly affirmed by authority. I have said that a solemn affirmation of a truth by authority erects it to the dignity of a dogma, and this is because authority is necessary to compel a universally right understanding of a truth which immediately or remotely must impose a moral obligation. In this way we know that the authority of God must be manifested to men in order that they may be moved to respect obligations which are only obligations of man to man as they are in the first place, obligations of man to God. But, if the authority of God shall be manifested to man, it must be in a way so clear that his understanding is satisfied, and with a form so impressive that his will is moved.

Is the authority of God so manifested?

My dear friend, you are as familiar as I am with the story of the Lord Jesus Christ. The verity of the facts is not in question, unless you impugn the divinity of the Son of God. Your doubt of that fact will be dispelled in due time, unless you persist in questioning the divinity of the author of a divine work; for the Christian Church, if it be not divine, must be shown to be a congeries of purely human forces, held together by the treacherous cohesion of human policy and wisdom. We have shown that the authority of God should be plainly manifested, if it be that man owes any duty to God. I maintain as an inexorable outcome of all that is proven of God, that His Church must be, and I maintain of His Church, that it cannot be, if it is not one, holy, Catholic and apostolic, in the sense in which these marks are evident in the body of them who acknowledge the Vicar of Christ, the Bishop of Rome.

It were insufficient and inaccurate to consider the existence of God as an isolated fact. God without the Church would avail nothing to mankind. It were useless for men to know of God's existence as of the existence of one who cared not for them. We cannot think of Him except as the source of law, but this title were a mockery if He claimed not obedience to His laws, or, if

claiming it, He set up no statute defining them. Nor would it avail if having set up His statute He appointed no officers to administer it; or, if having appointed the officers, He left them to interpret the statute according to their fancy, instituting no order of authority among them and giving them no invariable criterion of principle, justifying the established order and in virtue of which principle should be maintained among them a vigorous legislative and executive existence, an existence co-ordinate with and perfeetly adapted to human nature, in common with which it shares the element of growth, the noblest gift of rational being. But, of what avail would be papal infallibility, this invariable criterion of principle, if it had only the dead letter force of a law cut off from its source? What sort of God would He be, if He gave all these things and denied us Himself, saying as it were, to poor fallen humanity: "Here are the seeds of heavenly harvests; let human souls receive them; they contain the inert principle of eternal life, but the vivifying showers of my grace, the sunlight of my presence I deny you?" Here is the whole theory of Christianity, in its briefest terms, God, and God with us. There can be no God, if there is no certain guide acting under His immediate inspiration; no authoritative witness of Him, by which men may know Him, be persuaded to love Him and commanded to serve Him.

The highest legislative function of the church is the utterance of dogma, and her highest executive function is administration of the sacraments. How of her constitution these acts are essential to her being and how of her constitution these acts must be infallibly true we need not here attempt to explain. The constitution of the Church is a study in itself. Acknowledge the fact of the Church as proven by the existence of God, recognize the need of a Church to put humanity in communion with divinity and then examine as deeply as you may, the constitution of the church in itself, and the peculiarity of its office.

Before we can explain the Church as the only means by which our Lord should choose to put humanity in communion with divinity we must explain the necessity of His coming at all, or to institute a church. Let it not be said that it is unworthy of God to need to be propitiated, to have His anger appeased because of the offences of men. It were not unbecoming of God that we should suppose Him incapable of anger as we know it in ourselves. He is the God of love, not of wrath; but this question of atonement and of propitiation by sacrifice is not a question concerning God as He is in Himself, but it is a question concerning Him as He is in humanity's understanding of Him. A corrupt humanity cannot be appealed to by a law of love alone. God did not, does not prefer to threaten His vengeance against the dis-

obedient children of earth, but He would certainly be unwise if He suffered sin and forgave it, forgave the constant disobedience of His explicitly revealed law without the sinner even asking forgiveness or offering to undergo or expecting to have inflicted any punishment for his crime. Justice is the maintenance of law. Punishment is the vindication of the dogmatic force of law. Law would have no meaning without the auxiliary ideas of justice and expiation, and reparation. Propitiation as such, is only a type or earnest of man's sincere desire of forgiveness; it is simply a witness of his contrition. As for atonement, it holds of justice and is higher than propitiation, for by atonement evil is made barren, its bitter fruit is superseded by the good of the act of atonement.

Thus evil, as disobedience of a law, the expressed will of God, interrupts the action of that law as far as the law concerns the sinner, or those whom his sin affects; the growth of goodness is stopped; but, when he is repentant the sinner has at once a new duty to perform in trying, by a more active correspondence of his will with divine law, to compensate for the good lost by his sin having interrupted the action of good within him, or without him in so far as his sin concerned others. The correspondence of the human will with the divine is not only the highest conception we can form of goodness as it relates to us, but also, it shows goodness to be a living, expanding, positive quality. In this way we at once understand the necessity for an Universal Redeemer whose act of sacrifice alone could adequately, atone for the sin of Adam, a sin interrupting the action of good in the whole human race, wherefore the propitiation and atonement on Calvary were both so necessary to satisfy the divine justice that without this sacrifice of God Himself no individual propitiation and atonement could have merit. In this way is indubitably explained the reason for the incarnation of the Son of God, and all the facts of religion dependent on that greatest act of God's love for men. But, that He was made flesh, was born, preached, was persecuted, crucified, died, rose from the dead, ascended to the right hand of the Father and sent thence the Holy Ghost, was not only that He should atone for original sin but also that He might institute a means whereby all men to come shall know that He hath done these things and that salvation awaits them who believe and acknowledge Him to be the Son of God.

Law, in the sense of unvarying conditions, is plainly evident in this, our own order of being, and it is reasonable that, unless a supernatural necessity for contradicting it prevails, God respects the expression of His own will by respecting the laws of our being in this state where He has placed us. In this way we understand the existence of a visible church to be a necessity of the condition of things. In other words, as has been said elsewhere, all knowledge must come through the senses, the mind passing from simple cognitions to the apprehension and understanding of abstractions; therefore, unless God were pleased to operate a miracle in favor of every soul and give it supernaturally all knowledge necessary to salvation, it must be that He has instituted some visible and auricular means of providing mankind with knowledge of Him and of His law.

It is not repugnant to the idea of His goodness that there are some who are born and die without the Gospel, and therefore are deprived of that high measure of goodness to be won only through hearing and heeding the Gospel, because this evil is not the fault of God but it is the fault of man, who in the person of the progenitor of all men, Adam, turned his will against God; but yet, unless by original sin all good and will to good went out of mankind, there are individuals among the heathen who, by obedience to natural law, attain salvation, the gifts of which in their case, however, must reasonably be supposed to be immensely inferior to the Heavenly gifts awaiting the Christian believer.

Commence where we may in philosophical research, a conscientious advance always confronts us with the idea of will as the centre of the whole sidereal system of human thought. Development of the idea of will shows it to be the most direct connection between God and the souls of men. The affections of men, their love of this or that, is their voluntary inclination towards objects of affection. That is, love of God means the voluntary obedience of men to His law; because His law being the expression of His supreme will, and to love being a law, loving is the yielding of the will of men to the will of God. Human love is a conflict, or at its best, an affirmative action of human will. The subtle attraction between lovers is God's law, and in their sweet and willing yielding, marriage holily symbolizes that wondrous affirmative action of individual wills of which our highest conception is the servant of God "running" joyously "in the way of His commandments" and, as through a golden veil, discerning the very loveliness of His person in the reflected glory of His law. The action of loving is simple. In human affection, to be sure, love hesitates and errs, since human nature is fallen and we are drawn towards unworthy objects or fail of goodness ourselves, but insomuch as we have the will to love God, loving is the simplest action of life. What is more simple than to know that God is all goodness, that only goodness can come from Him, and therefore obey His law with all our will? Moreover, we are born with the disposition to love; this is God's will in the natural order, and the more we love the better are our minds enlightened and the more do we understand

the right of God to command love. Love scarce may know itself in these high words, but this same sublime love buds and blooms in every honest soul who follows every day goodness, even though to the word God he may pay only the formal homage of religious fear.

Weigh well, ye skeptics, the philosophical axiom that will is superior to understanding. Herein lies your error, fatal fruit of some first act of disobedience, that ye reject God's law of love. Cure yourselves by loving. Give over your endless weaving of vain subtleties, and remember that wisdom walks not hand in hand with knowledge. She comes direct from the holy place on high, she who is "more precious than rubies," and she is God's gift to His loving servants alone.

I feel it were needless, my dear friend, to attempt more for you than to clearly identify the Hope of Mankind, the anchora spci of true religion. I cling to the facts of true religion because it is as evidently a means of safety as an iron anchor would be to a drifting ship—an anchor which, having the form of one, and actually holding fast the tossing soul against the waves of doubt and affliction. I willingly accept as being of the real nature of an anchor, without questioning how far the base alloy of unwise human discipline or a false tempering on the historian's forge may impugn the technical accuracy of title by which this mystical anchor claims our allegiance. In point of fact, sufficient labor will discover the true title in the Divine Maker's stamp, even without the test of revolutionary fire out of which the metal comes, time and time again, in all its pristine purity and strength. If this allegory is true, and we think it is, it vindicates well enough the implicit faith of all those who, by reason of lacking high endowment or opportunity, are prevented from understanding the proofs of religion more deeply than their crude reasonings explain for them the testimony of deeper things in the outward forms and customs of Church teaching. Moreover, the spirit of the Church is catholic; of its divine constitution, in the infallible truth of its different functions it is especially fitted to reach the hearts of all, and to men infinitely various in intelligence and good will it speaks an universal language; the miracle of tongues is daily operated through its sacred ministry by the Holy Ghost, who, not in flames, but in the Bread of Life, comes to teach and console and command the subjects of the heavenly kingdom. Philosophize as deeply as you may, there is no solution for the mystery of death except Christian faith, a teaching which not only robs the grave of its victory, but makes the life of the most afflicted and infirm a life wherein joy more abounds than sorrow, and lightheartedness than pain.

As for her, the Catholic Church, the Mystical Spouse of Christ, the Pearl of great price, the kingdom of God on earth, let me write down for you the panegyric of her penned by Cardinal Newman. whom I would most fondly emulate for piety and wisdom: "There is but one form of Christianity, my brethren, possessed of that real internal unity which is the primary condition of independence. Whether you look to Russia, England or Germany, this note of divinity is wanting. In this country especially (England) there is nothing broader than class religions; the established form itself is but the religion of a class. There is one persuasion for the rich and another for the poor; men are born in this or that sect; the enthusiastic go here, and the sober-minded and rational go there. They make money, and rise in the world, and then they profess to belong to the Establishment. This body lives in the world's smile, that in its frown; the one would perish of cold in the world's winter, and the other would melt away in the summer. Not one of them undertakes human nature; none compass the whole man; none places all men on a level; none addresses the intellect and the heart, fear and love, the active and the contemplative. It is considered, and justly, as an evidence for Christianity that the ablest men have been Christians; not that all sagacious or profound minds have taken up its profession, but that it has gained victories among them, such and so many, as to show that it is not the mere fact of ability or learning which is the reason why all are not converted. Such, too, is the characteristic of Catholicity; not the highest in rank, not the meanest, not the most refined, not the rudest, is beyond the influence of the Church; she includes specimens of every class among her children. She is the solace of the forlorn, the chastener of the prosperous, and the guide of the wayward. She keeps a mother's eye for the innocent, bears with a heavy hand upon the wanton, and has a voice of majesty for the proud. She opens the mind of the ignorant, and she prostrates the intellect of the most gifted. These are not words; she has done it, she does it still, she undertakes to do it. All she asks is an open field and freedom to act. She asks no patronage from the civil power; in former times and places she has asked it; and, as Protestantism also, has availed herself of the civil sword. . . . But her history shows that she needed it not, for she has extended and flourished without it. She is ready for any service which occurs; she will take the world as it comes; nothing but force can repress her. See, my brethren, what she is doing in this country now? For three centuries the civil power has trodden down the goodly plant of grace and kept its foot upon it; at length, circumstances have removed that tyranny, and lo! the fair form of the Ancient Church rises up at once, as fresh and as vigorous as if she

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had never intermitted her growth. She is the same as she was three centuries ago, ere the present religions of the country existed; you know her to be the same; it is the charge brought against her that she does not change; time and place affect her not, because she has her source where there is neither time nor place, because she comes from the throne of the Illimitable, Eternal God."

God be praised!

THE ARGUMENT OF AFFIRMATION.

It is easy to understand that the abstract condition of unity is a supreme or peculiar condition which precludes its contrary, of fractions which cannot be imagined as personal entities. This applies to any concrete application of the principle we may choose. Unity, oneness, is the peculiarity of things which, if broken or divided, lose this supreme characteristic. Body and soul are one man, and if death annihilated the body, personality, the unity, the oneness of each man would cease beyond the grave, and we could imagine nothing but a vague, generic humanity. Therefore, if we make unity a test of truth in a certain case, we have only to prove unity in order to prove truth, and, by implication, prove falsehood of the condition of impersonal fractions. In other words, to prove the condition, A, to be right is to prove its contrary, B, to be wrong. This explains the affirmative temper of Christian philosophy. The Christian philosophy is synthetic, and prefers to defend dogma by lucid definitions rather than by querulous analysis of the contrary positions assumed by heretical thinkers.

Our non-Catholic friends cry out against us that we are ignorant of their various cultures; that we ought to read their sides of the question—put ourselves, as it were, in their positions, to share, as one of them too aptly suggested, a common danger, as in rescuing a man from a frozen river we must walk on thin ice and jeopardize our own lives also. Why should we? We are willing to apply every test of historical inquiry, and prefer the honest testimony of the opposite party; we are willing to hear the testimony of honest physicians, and have no fear of any metaphysical truth; but we refuse to stultify our own intelligence, and substitute self-reliance for faith and criticism for infallible authority. What have we to do with the reasonings of negation? What have we to do with the painful digests of men who attack, or condemn, or ridicule truths which we have tested and are testing by affirmative analysis? Unless it can be proved that faith is sustained, hope is nourished, and charity is made to abound by the principle of negative analysis, we cannot be persuaded to turn about and prove the truth of Christian dogma by laboring as "devil's advocate."

Let us appeal to unity of doctrine, one of the notes of the Church, whereby is meant a logical consistency in all the teachings of Christianity. Unity is almost a self-evident proof of truth; for time-serving Erastianism, a shifting of creeds to suit human passions and ambitions, a teaching of any one principle as essential now and non-essential then, an irresoluteness of meaning concerning essential things which leaves at variance persons of nominally the same communion; surely, these things are not unity; surely, they are not reconcilable with the idea of inflexible law, the revealed will of God; and surely, the Church is nothing if she does not speak with the infallible certitude and authority of her divine spouse, Jesus Christ. Wherefore, if we can prove such a thing as unity, as a test of truth for Catholic Christianity, we have proved the falsehood of all teaching contrary to Catholic dogma.

"L'Eglise catholique n'est point argumentatrice de sa nature; elle croit sans disputer, car la foi est une croyance par amour, et l'amour n'argumente point."—De Maistre.

ADRIAN WORTHINGTON SMITH.

CATHOLIC TENDENCY IN AMERICAN LITERATURE.

A CONGREGATIONAL minister of our acquaintance, not long ago, proposed to form, in the city where he lives, a literary club from which religion and politics should be excluded. This, it appears to us, would be just about as reasonable and satisfactory as to organize a society for the study of physiology, and then exclude from it all consideration of the heart and the brain.

For, there can be no literature with any sort of vitality in it, that does not contain or imply the writer's views of religion, whether for or against, doctrinal or diffused, conscious or unconscious. Not even the lighter poets or novelists—those among them, at least, who are worth considering at all—can wholly avoid showing or suggesting, here and there, what principles of sociology and government inhabit their minds; that is, principles of politics, not in the partisan, but in the philosophic sense; and the same is true, in various degrees, as to other kinds of literature. In fact, no argument is needed to prove that these two great elements are so inwoven with the whole fabric of thought and expression that the study of literature, leaving them out, must be a superficial one. Nevertheless, there is, among non-Catholic critics and essayists, a tendency to regard and to discuss literature precisely in this way; to analyze the outer shell rather than the inner substance.

No doubt, it is because of this tendency that in all the histories or surveys of American literature, which have come to our notice, there is a strange lack of central, comprehensive views—an absence of proportion. To understand a literature, we must be able to measure it by principles larger and deeper than the literature itself, or than ourselves.

Now, since Catholics at least have the means for such measurement, we should try to apply them; and, by way of guiding-thread at the outset, a singular fact connected with the mariner's compass may be recalled, the bearing of which will soon become clear.

We are accustomed to think of the magnetic needle as always pointing absolutely to the north. But, in fact, it varies all the time. What is called "magnetic declination" causes it to change, little by little, the angle at which it stands to the geographical meridian. First, it moves to the eastward, continuing in that direction for a long period of time; after which it slowly swings back "into true," as we may say, until it once more points due north, like the meridian line itself. Then, it begins to lean away again; but, this time,

westward until, at last, it points as much as twenty-four degrees to the west of north. When it has reached that wide angle of divergence, it reverts again gradually to the east. Thus the compass-needle oscillates, like a pendulum; but slowly,—too slowly for us to perceive the motion at any one time. From its extreme western to its extreme eastern inclination it swings only once in three hundred and twenty years.

Much the same is it with the drift or tendency of a national literature. Some great influence—always more or less mysterious—may be controlling such a literature and causing it to point in one general direction; although, when examined at some particular moment, it will be found to diverge considerably from that line. If our study of this divergence includes a wide enough range of time and place, we shall discover that the variance, the oscillations, are merely incidental to one permanent and ruling tendency.

Whoever looks for the first time at the scattered products of colonial American writers, may, perhaps, be at a loss to find in them any common aim or far-reaching inspiration. Of genius or fine artistry, we must confess, they showed little. But, let us note a few of those works. New England's later fame in authorship has led most people to take it for granted that American literature began in Massachusetts. This is not the fact. Its beginning was in Virginia, where, in 1607, more than a dozen years before the Pilgrims touched Plymouth Rock, sturdy Captain John Smith, world-famous through the Pocahontas legend, composed that graphic volume known as "A True Relation of Virginia." There, too, George Sandys completed his poetic translation of Ovid's "Metamorphoses," a fabric of elegant scholarship that still survives in good repute; and William Strachey, the Secretary of Virginia. wrote in that colony, although it was printed in London, his powerful narrative of the wreck, on the Bermudas, of the Sea-Adventure, Sir Thomas Gates's vessel, in which the author himself had sailed for America. This book, done in 1610, is, with some reason—on account of its vivid description of a Bermudan storm supposed to have given Shakespeare hints for "The Tempest," the scene of which was laid near "the vexed Bermoothes." The list of Southern writings at that time is not a long one. Yet it includes an account of the arrival of the Maryland colonists, written in Latin by the Jesuit Father Andrew White, who expressed the hope that in this new land there would "be sown not so much the seeds of grain and fruit-trees as of religion and piety." The spirit of that hope was full of significance. For it did not mean that agriculture and thrift should be neglected, but that religious principles should be cultivated still more; indeed, first of all.

The missions of the Jesuits and other priests, in central New

York and the West, the story of which, a Protestant writer has declared—" is as marvellous as a tale of chivalry or legends of the lives of saints;" Father Jogue's martyrdom among the Mohawks; the discoveries, the devoted spirit of Champlain, and his roughly-written, truthful books; the "Relations" and Journals of the Jesuits, describing their work among Indians from 1630 till nearly 1700; the pathetic episode of Père Marquette's death in Michigan; the herculean journeys of De la Salle down the Ohio, the Mississippi, and in Texas; and Joliet's expedition—all these things, likewise, really form part of the material of American literature. Their record, though made in French, belongs to the New World, and has been largely incorporated in our later histories; notably, those of Francis Parkman, who-though prejudiced against Rome, and not in sympathy with Catholic faith—has given his life to the narration of these noble events in books of rare vivacity, charm and force. Parkman, looking upon the French-American pioneers as opposed to civil and religious liberty, thinks that the Jesuits were providentially massacred by Iroquois Indians, and that the disasters which befell the French in attempting to secure inland America were a providential aid to the triumph of New England. This is to take but a short-sighted view of American history. Catholic explorers found the heart of this country, they traced its great artery in the Mississippi; Catholic priests alone were able to Christianize and partially civilize the red men; and they marked a vast territory with the sign of the cross. Material power, except in Louisiana, vanished from the nation to which these missionaries happened to belong; but the sign of the cross will remain where they placed it forever.

Although, according to the words of Parkman, the Puritans "in defiance of the four Gospels" made the pursuit of gain a duty, and linked "thrift and godliness in equivocal wedlock,"-still, they too, were animated by a pious zeal of their own. It is important to note that in Massachusetts, as in Catholic Maryland and the western missions, the dominant idea was that of the supremacy of religion; just as the master-motive of Columbus, in making his great voyage of discovery, was to bring new countries and heathen populations under the dominion of Christianity. So, then, we get the first trace of a consistent purpose or element in American literature, which might naturally be expected to reappear later on. America, discovered, was like a land new born, the child of Christendom. Never before had a vast country been thus occupied and developed distinctly as a province added to the Christian realm. The religious idea floated like a banner above the invading multitude; no matter what the private faults or unworthy motives of individuals here and there might be.

The colony on Manhattan Island perhaps was an exception; having then, as New York city has now, a trait of cosmopolite worldliness; so receptive to impressions and influences from all sides, as to run some risk of becoming indifferent or fickle. Yet, though disclosing little of ideal aspiration, New York had her strong literary politician, Morris of Morrisania, and Cadwallader Colden, savant and historian. Pennsylvania, founded by the gentle Quakers, who were shrewdly gainful of earthly goods, still kept the honor of God to the fore. George Fox, the originator of Quakerism, conceived that man could get wisdom enough from the inner light; and on the theory that "God stood in no need of human learning," held that man did not need it either. Hence he looked down on intellectual culture. But William Penn and his associates, being educated and studious, one of their first cares was to set up schools in Pennsylvania; and accordingly Philadelphia unfolded a literary spirit. Wherever men of intellectual habit went, with school and printing press, literary expression followed inevitably.

Such men were the framers of New England, who had received much training within certain lines of thought. They did not come here to spread religious freedom, but—as their acts and annals show and historians admit-they sought liberty of worship for themselves alone, where they could forbid an equal liberty to every one else. Their policy toward the Indians, whom the Rev. John Eliot alone among them tried to convert, was aggressive. They established an austere, iron-bound theocracy, which permitted slavery, in the holding of compulsory bondmen, and was absolutely intolerant in matters religious. It was perhaps the closest, most rigorous union of church and state the modern world has seen. No man in their colony could be a land owner and voter, unless he conformed to the Puritan tenets; and Puritan ministers were practically the government. Nevertheless, within their bounds, they fostered the germ of self-government, which afterward broke down the barrier of exclusion and spread far beyond the original nursery. The strong convictions, powerful character and studiousness of their preachers, also, brought forth an energetic literature of sermons and histories, which, although dull reading to the average man or woman now, had striking qualities of earnestness and sincerity. Moreover, it is a mistake to suppose, because the Puritans frowned upon art, that they forbade poetry. On the contrary, the first book actually printed in America was a version of the Psalms, made by them and issued at Cambridge, 1640. was, in a sort, metrical, but not rhythmic; as witness this from the 63d Psalm (62d of the Douay Bible):

"When as that I remembrance have Of thee my bed upon, And on thee in the night watches Have meditation."

Magistrates, grave divines and staid matrons, as Prof. Moses Coit Tyler points out, universally gave way to the verse-writing mania. They allowed themselves this one artistic indulgence of poetry; perhaps only for the reason that they did not know what true poetry was. At any rate, the chief musician of New England was Anne Bradstreet, a governor's wife; called "the Tenth Muse," and with entire propriety—since no one would ever have recognized her as having anything to do with the original Nine. Here is a sample of her utterance on the Four Ages of Man:

"Lo, now four other act upon the stage,
Childhood and youth, the Manly and Old Age:
The first, son unto phlegm, grandchild to water,
Unstable, supple, cold and moist's his nature.
The third of fire and choler is composed,
Vindicative and quarrelsome dispos'd.
The last, of earth and heavy melancholy,
Solid, hating all lightness and all folly."

But what we had meant to dwell upon here, was the mastery with which religion held these New England forefathers. Their zeal made them morose, intolerant, often unjust and tyrannical. It even tainted the devoutness of their attitude towards God. For, in their hatred of the Catholic faith of their forefathers, they actually abolished the observance of Christmas. Think of a body of people professing to be Christians and to believe the divinity of our Lord, yet allowing their hearts and minds to become so warped by human resentment, that they actually dishonored and ignored the natal day of Christ on earth! Yet we must credit them with obeying sincerely, though in a mistaken manner, their conscience. It is the power of conscience in the Puritan mind which, above all, has left its impress on their literature and much of our civilization, and deserves respect.

Perhaps there is no example of this, more touching and instructive than the behavior of Samuel Sewall, chief-justice of the Massachusetts Supreme Court near the end of the seventeenth century. Sewall was learned, upright, brave. He was the first to urge the abolition of slavery in New England. Women should think kindly of him; for he took up their cause in a point of importance. One day, in a book called "The British Apollo," he read this slightly ungrammatical question: "Is there now, or will there be at the resurrection any females in heaven; since there seems to be no need of them there?" Sewall's chivalry, being aroused, he wrote a

treatise to prove that the souls of women would be saved. "If," he contended, "there were no need of women in heaven, by the same argument there could be no men; since God really has no need of any creature." This is perfectly sound. And his conclusion was equally sound, that "There are three women that shall rise again,—Eve, the mother of all living; Sarah, the mother of the faithful; and Mary, the mother of our Lord. And if these three rise again, without doubt all will." The passage is worth remembering; for it shows that although the Blessed Virgin was deprived of all outward honor and reverence among the Puritans, they could not banish reverence for her from their hearts. But the special proof of Sewall's loyalty to conscience was this: he presided at some of the witchcraft trials, and condemned certain innocent persons to death. Five years later, convinced that he had done wrong, he wrote a confession of his error and caused it to be read publicly in church. Here we have an example of the power of the Puritan conscience and, even more emphatically, a Puritan acknowledgement of the necessity of confession, which later Protestants completely deny.

As the Quaker poet Whittier has written of him:

"Green forever the memory be
Of the Judge of the old Theocracy,
Whom even his errors glorified,
Like a far-seen, sunlit mountain-side,
By the cloudy shadows which o'er it glide!"

The Puritan conscience did not always work so wholesomely; as, for instance, when it caused Quakers to be tied naked to the tail of a cart, and whipped from Salem to Boston; and as when Cotton Mather (one of the present writer's ancestors) having been active in persecuting those accused of witchcraft, or at least keeping up a morbid excitement about them, was afterward reproached, and apparently suffered compunctions, but could not quite bring himself to humble confession; claiming credit, rather, for the attention he had given the "afflicted," with a view to saving their souls. This was a case of conscience wandering in the labyrinth of pride. Yet it is interesting to observe that Mather, from early youth even to the end, kept frequent fasts and vigils. He desired to resemble a rabbi mentioned in the Talmud, whose face was black by reason of fasting. Once in his old age he abstained from all food three days together, and spent the time as he expressed it, in "knocking at the door of Heaven." He also had minute rules for devout thought. "When he put out his candle (his son tells us, in his biography), it must be done with an address to the Father of Lights, that his light might not be put out in obscure darkness." "When he washed his hands he must think of the clean hands, as well as pure heart, which belong to the citizens of Zion." And even when he had toothache, he considered whether he had not sinned with his teeth—by excessive eating, or by evil speeches in which the tongue touched the teeth. This decidedly savors of scruple. Yet the custom of associating pious thoughts and meditation with every-day actions was one directly drawn from Catholic practice.

Here we must take a long leap, from those early days, to the period following the American Revolution. The writings of the early settlers made no great literary impression on the rest of the world. Even now, what they did is more important to us than what they wrote. After their time, the religious element in our general literature took what would now be called, in common phrase, a "back seat." The first American to win renown in Europe as an author was Benjamin Franklin, whom the skeptic, David Hume, welcomed in 1762 as "the first great man of letters for whom we are beholden" to America. As the author of "Poor Richard's" prudential maxims, and later of his famous "Autobiography," his fame spread far and quickly. Great was the honor paid him as an exponent of purely common sense philosophy, a pioneer in electricity, a sturdy patriot and brilliant diplomatist. In the Metropolitan Museum, New York, you will find a large collection of portraits and images of him, on paper, in metal, in porcelain, gathered from all countries of the earth. You will see him figured as a German, a Frenchman, a Chinese Mandarin; as everything except a saint. And he was not a saint—even figuratively. Mr. Julian Hawthorne gives us perhaps the best short estimate of Franklin, when he says: "He lacked the instinct of reverence; he was unspiritual; he was insensible to the sublime; grace and taste were not in him; irreligious he was not, though he was as far as possible from sounding the depths of religious experience so familiar to his contemporary, Jonathan Edwards. He formulated a creed to the effect that there is a God, that men should help one another, and that evil will bring its penalties; and a code of moral rules, which is really the expression of the shape which his practical experience of vice had given to Franklin's character. Obviously there were heights that he could never reach."

Franklin, with other students of natural science who had become numerous in this country by the middle of the last century, developed what has been called "a sturdy rational spirit." But the rational spirit alone does not suffice for the guiding of national thought and letters. Franklin represented only the "practical" side of American nature; called practical because it leaves out the ideal. His influence has long since waned, as everything materi-

alistic is bound to wane. After the first quarter of the nineteenth century, we come to a loftier order of writing. Great poets and novelists, and even the fairly good ones, usually present, by means of their imaginative insight, something that points clearly toward the pole-star of truth and directs them in their wanderings, even though they may be quite adrift and at sea. As the blatant irreligion and illogicalness of "Tom" Paine, during the revolutionary period, reasserts itself in the unreasoning bluster of "Bob" Ingersoll—which we may call the philosophy of immaturity, or of calflike undevelopment—so the mundane and unspiritual mood of Franklin has recurred latterly in scientific writers, historians and philosophic essayists. But equally, and perhaps even more strongly, the religious sentiment has made itself manifest in many of our modern authors.

We know how Longfellow, Unitarian and unbeliever though he remained, drank at Catholic sources of art and poetry. He showed this crudely in his "Midnight Mass for the Dying Year." In the riper poem on "Nüremberg," visiting the Church of St. Lawrence, he sings:

"Here, when art was still religion, with a simple, reverent heart, Lived and labored Albrecht Dürer, the evangelist of art;"—

Dürer, the wonderful designer and engraver of illustrations of the Passion of our Lord! In Longfellow, too, there seems to have dwelt a life-long desire to identify his own art in some way with religion. His purpose in writing The Golden Legend was, as he said, to show "that through the darkness and corruption of the Middle Ages ran a bright, deep stream of faith, strong enough for all the exigencies of life and death." Père Gratry once summed up the difference between society in the Middle Ages and that of our latest centuries, in these words: "Society then was Catholic and sustained men above themselves, but now society is Catholic no longer, and drags men downward with itself." Accepting this as true, we shall not quite agree with Longfellow about the darkness of the Middle Ages. But when he speaks of the "bright. deep stream of faith," it is our faith that he means; and to it he pays some beautiful tributes, in this versified story of the mediæval time; as when the child Elsie, proposing to sacrifice her own life for another, says:

> "Do I not know The life of woman is full of woe?"—

and her mother answers:

"It is the malediction of Eve."

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Thereupon Elsie replies:

"In place of it, let me receive
The benediction of Mary, then."

Exactly the Catholic idea, that the Blessed Virgin is the second, or the sinless Eve! Again, Prince Henry says to Elsie:

"O pure in heart, from thy sweet dust shall grow Lilies, upon whose petals will be written 'Ave Maria,' in characters of gold!"

And, once more, on another point, Prince Henry exclaims:

"God's blessing on the architects who build
The bridges o'er swift rivers and abysses
Before impassable to human feet,
No less than on the builders of cathedrals,
Whose massive walls are bridges thrown across
The dark and terrible abyss of Death.
Well has the name of Pontifex been given
Unto the Church's head, as the chief builder
And architect of the invisible bridge
That leads from earth to Heaven."

Still further, approaching Italy, he says:

"This is indeed the Blessed Mary's land;
All hearts are touched and softened at her name,
And even as children who have much offended
So men, repenting of their evil deeds,
Offer to her their prayers and their confession,
And she for them in Heaven makes intercession.
And if our Faith had given us nothing more
Than this example of all womanhood,
So mild, so merciful, so strong, so pure,
This were enough to prove it higher and truer
Than all the creeds the world has known before."

It is a Catholic personage who is made to speak here, but we must remember that the words and the warmth of expression are Longfellow's own. The Golden Legend was only one part of a trilogy, which he had in mind and was working out during a period of over thirty years—the most of his poetic career. Late in life he wrote The Divine Tragedy, the story of Christ, as the first part, adding The New England Tragedies, or the story of religious persecution in New England, as the third part; and published the whole under the title of "Christus: A Mystery." The New England portion, as representing modern Christianity, was a sorry failure poetically, and by narrowing the field to these two episodes of Quaker and witchcraft wrongs, it left out of reckoning

true modern Christianity, which is the Church, now and always the same. But at least in his "Finale," where St. John is supposed to speak, the poet rebuked the falsity of Puritan oppression by returning

. . . . "unto the single thought By the great master taught, Not he that repeateth the name, But he that doeth the will"

shall be saved. Catholics are not likely to quarrel with this assertion. The trouble about Longfellow, here, is that he takes liberties with St. John, whom he represents as "wandering over the face of the earth," declaring that

"The clashing of Creeds and the strife
Of the many beliefs that in vain
Perplex man's heart and brain
Are naught but the rustle of leaves,
When the breath of God upheaves
The boughs of the tree of life,
And they subside again,"

What does he mean? It is chiefly a rhetorical fancy, but if we can decipher from it any clear idea, the implication is apparently that all this vain clashing is perfectly natural, inevitable and harmless, and must go on forever like the helpless surging of branches. This is both vague and untrue. So also is the statement put into St. John's mouth, that

"From all vain pomps and shows
And the craft of tongue and pen,
Bewildered in its search,
Bewildered with the cry:
Lo, here! lo, there! the Church!
Poor sad humanity
Turns back with bleeding feet
By the weary road it came."

A large portion of humanity does nothing of the kind, but is quite certain of its footing, and still goes forward, not backward, with the true Church on the road laid out for it by Christ and His Apostles. The first part of "Christus," The Divine Tragedy, is also weak, largely because Longfellow here, as in his Salem play, relied only upon himself; and, notwithstanding all his religious aspiration, he never fully believed in the actual divinity of Christ, therefore could not express it. What stands out before all is the fact that in this trilogy the only successful part is The Golden Legend, which relies upon Catholic ideas, subject, scenery and a theme taken from a story of the Catholic past, the material and sentiment of which were made and moulded ready to his hand.

Longfellow, too, throughout his life, was a close and almost devout student of Dante, the great Catholic poet of the ages, and became his best literal translator in verse. The sonnets with which he prefaced that translation are filled with an exquisite spirit of piety and reverence. Although he sometimes went curiously astray, as in his Wayside Inn tale of *Torquemada*, and always used Catholic matters mainly as a sort of artistic fancy dress when it suited his poetic purpose, still enough has been quoted here, and may be found in other poems of his, to show that he had a strong apprehension of the inner as well as the outward force and loveliness of Catholicity.

Another eminent New England poet and critic, who explored Dante deeply, was James Russell Lowell. In his massive and brilliant essay on the great Italian, he says that Dante believed that "obedience to God's law was the highest duty of man," also that his "convictions were so intimate that they were not merely intellectual conclusions, but parts of his moral being." Now, non-Catholics also hold convictions as to religion, but they very often hold them intellectually and, in a sort, separate from the whole moral being. A Catholic cannot keep the two things apart, unless he be a bad Catholic; in which case he is conscious, at the bottom of his heart, that he is a humbug, and that the punishment he brings upon himself will be long and bitter hereafter. Lowell seems to have perceived the true Catholic union of attributes in Dante. He also remarks: "Dante's want of faith in freedom [alleged] was of the same kind with Milton's refusal to confound license with liberty." Again he tells us of the "Divina Commedia:" "We have heard that the 'Commedia' was a sermon, a political pamphlet, the revengeful satire of a disappointed Ghibelline—nay, worse—of a turncoat Guelph and yet, singularly enough, the circle of its charm has widened in proportion as men have receded from the theories of Church and State which are supposed to be its foundation, and as the modes of thought of its author have become more alien to those of his readers. [Protestant readers are here referred to. In spite of all objections, the 'Commedia' remains one of the three or four universal books that have ever been written." And he even says of Dante: "His readers turn students, his students zealots, and what was a taste becomes a religion."

The cult of Dante may have become with Lowell, as with so many others outside the fold, a sort of religion; but Catholicity did not become Lowell's faith. Yet in one of his earlier and best known pieces, *The Vision of Sir Launfal*, he tried his best to tell the story of a Catholic who, in a Catholic time, learned, by long pilgrimage and suffering, the lesson of humility and Christian

brotherhood. He there used Catholic ideas and allusions abundantly, if not with clear knowledge. But an example of his Catholic leaning, still more in point, is the short poem

ALL SAINTS.

"One feast, of holy days the crest, I, though no churchman, love to keep, All Saints-the unknown good that rest In God's still memory folded deep: The bravely dumb that did their deed, And scorned to blot it with a name, Men of the plain heroic breed, That loved heaven's silence more than fame. Such lived not in the past alone, But thread to-day the unheeding street; And stairs to sin and famine known Sing with the welcome of their feet. About their brows to me appears An aureole traced in tenderest light, The rainbow-gleam of smiles and tears In dying eyes, by them made bright; Of souls that shivered on the edge Of that chill ford repassed no more, And in their mercy felt the pledge And sweetness of the farther shore."

Now, if he celebrates the unknown saints, why not also the known and the canonized? One sees, at least, how close he came to a perception of the Communion of Saints. Lowell's most remarkable poem in this direction, however, is *The Cathedral*. Here he tells us how he visited the Cathedral at Chartres, in France, and records his reflections. They were secular, of course, and in places superficial, but had a strong religious tinge. The sculptured figures on the cathedral porch seemed to say to him:

"Be reverent, ye who flit and are forgot,
Of faith so nobly realized as this."

* * * * * *

"I entered, reverent of whatever shrine
Guards piety and solace for my kind
Or gives the soul a moment's truce of God."

But when he passes within, he asks:

"Was all this grandeur but anachronism?

Is old religion but a spectre now,

Haunting the solitude of darkened minds,

Mocked out of memory by the skeptic day?"

Lowell, like most Protestants, is not aware that great numbers of Catholics have taken Holy Communion at Mass early in the morning, long before he had thought of stirring from bed. Hence he inclines to muse upon the deserted state of the temple and the sanctuary at the hour of his visit. Suddenly he sees an old woman on her knees, telling, as he puts it, "mechanic beads"; though we know that, however rapidly the beads may be said,—and the original of the word is the Anglo-Saxon "bede," which means "prayer" itself,—they are not mechanical, so long as there is faith in the heart. At first he assumes that the old woman is appealing to some saint as a

"Bribed intercessor with the far-off Judge."

But then a kindlier thought rebukes him, and he cries out:

"God is in all that liberates and lifts,
In all that humbles, sweetens and consoles:
Blesséd the natures shored on every side
With landmarks of hereditary thought!
Thrice happy they that wander not life-long
Beyond near succor of the household faith,
The guarded fold that shelters, not confines!"

There could scarcely be a better statement as to the effect of the true faith, which protects but does not confine, and, on the contrary, makes the believer genuinely free under divine law, as opposed to human license.

Immediately, though, Lowell tries to drag himself back from this perception, inquiring:

"Or was it not mere sympathy of brain? A sweetness intellectually conceived In simpler creeds, to me impossible?"

But, in the next breath, he admits:

"Yet for a moment I was snatched away
And had the evidence of things not seen;
For one rapt moment;—then it all came back,
This age that blots out life with question-marks,"

Here we have the Protestant mind, in the person of one of its worthiest American poets, drawing close to the beauty of holiness and true faith, suddenly springing away from it again, and yet admitting that it does so because his present age blots out life with question-marks. Life? What life? Evidently, from the context, he means the soul's life. And why should he submit to let it be blotted and obscured with doubts? We have not space here to give one-half the passages we had marked in Lowell's Cathedral. But surely these lines must be quoted:

"The Cross, bold type of shame to homage turned, Of an unfinished life that sways the world, Shall tower as sovereign emblem over all."

Reflect: this is what Lowell says, whose New England ancestors (like those of some others among us) refused to allow the cross to be shown anywhere as a symbol of Christian faith! Yet all this, by no means, makes Lowell a Catholic Christian. Like Longfellow, though approaching so near in perception, he falls far short of realization. He fails to follow out the train of spiritual thought to its logical result. So, in spite of its really startling gleams of truth, The Cathedral remains full of false inference, doubt and discontent; and it ends, like Longfellow's "Christus," with a feeble sophistry; a flight for refuge to the notion that each man, after all, need only deal with God directly by his own light. Says Lowell:

"If sometimes I must hear good men debate
Of other witness of Thyself than Thou,
As if there needed any help of ours
To nurse Thy flickering life, that else must cease,
My soul shall not be taken in their snare."

This is the same fallacy of the Quaker in saying that God has no need of human learning, and of those translators of the Bay Psalm Book, who, in excusing their bad workmanship, begged it to be remembered that "God's altar needs not our pollishings." The existence of God does not depend on our accepting his testimony, but our own state of existence does very much depend on that. Lowell's *Cathedral*, notwithstanding his involuntary self-deceit and intellectual pride, is a remarkable exposition of the thoughtful Protestant mind, as he himself expresses it:

"Buzzing o'er past and future with vain quest;"-

desiring peace and faith's completeness, and yet afraid or incompetent or lacking grace to grasp it.

It may be urged that Longfellow and Lowell were strongly tinged with European culture, and, by their journeys abroad and study of old literature, had become imbued unconsciously with Catholic sympathies. But what shall we say of Nathaniel Hawthorne? One ancestor of this greatest among American prose romancers, William Hathorne, violently persecuted the Quakers. Another, John Hathorne, was even more vengeful toward the accused Salem witches, whom he caused to be put to death. Both were bitter foes of the Church of England, and if a genuine Catholic had fallen into their power, it is hard to imagine what extreme of punishment would have satisfied their animosity against

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him. Nathaniel Hawthorne himself grew up under the strictest Puritan influences of Maine and of Salem, Massachusetts. He never saw Europe until he was forty-eight years old; and the book that first gave him great fame, "The Scarlet Letter," was not published until he was forty-six. Up to that time, we must bear in mind, Catholics in New England were few and far between, existing as an almost proscribed body. Yet Hawthorne's "Scarlet Letter" brims over with satire upon the warped, uncharitable religion and practice of his Puritan predecessors. Now let us see what he has to say, incidentally, in that book, bearing on Catholicity.

In one chapter he tells us of the Puritan minister, Arthur Dimmesdale:

"Here the pale clergyman piled up his library, rich with parchment-bound solios of the Fathers, and the lore of Rabbis, and the monkish erudition, of which the Protestant divines, even while they vilified and decried that class of writers, were yet constrained often to avail themselves,"

Especially notable is the conversation in the tenth chapter between Arthur Dimmesdale, the guilty minister, and Roger Chillingworth, on the subject of confessing sin. Chillingworth, the physician, who is also the wronged husband, asks—if the revelation of sin "at the last day" is going to be a relief, why guilty persons should not seek the solace of confession here in this life?

"They mostly do," answered Dimmesdale. "Many a poor soul has given its confidence to me, not only on the death-bed but while strong in life and fair in reputation. And ever, after such an outpouring, oh, what a relief have I witnessed in those sinful brethren! . . . Yet some men bury their secrets," he continues.

"Such men deceive themselves," Chillingworth replies. "They fear to take up the shame that rightfully belongs to them. But, if they seek to glorify God, let them not lift heavenward their unclean hands! If they would save their fellow-men, let them do it by making manifest the power and reality of conscience, in constraining them to penitential self-abasement!"

Truly this is a strong utterance, coming from an imaginary Puritan and written by an author of unmixed Puritan descent. The physician, Chillingworth, while urging open confession thus, really desired that Dimmesdale should keep his sin secret, so that Chillingworth himself might go on torturing the poor minister's soul all through the earthly life. The lesson of the book is that open confession was the only road to escape from such torture, the only way to the soul's freedom. When the minister mounts the pillory and proclaims his sin, the vengeful friend, Chillingworth, cries:

[&]quot;Hadst thou sought the whole earth over, there was no one place so secret where thou couldst have escaped me—save on this very scaffold!"

[&]quot;Thanks be to Him who hath led me hither!" answered the minister.

So much for open, public confession as advocated in "The Scarlet Letter." In "The Blithedale Romance," written soon afterward, which gave the substance of Hawthorne's experience at the half religious, half socialistic Brook Farm community, he wrote: "As the basis of our institution, we proposed to offer up the earnest toil of our bodies as a prayer for the advancement of our race;" an almost purely Catholic conception. "The Scarlet Letter," his first triumphant romance, instilled the idea of public confession. His last great work, "The Marble Faun," written about ten years later, brought out with great force the absolute necessity of the secret auricular confessional. Very curiously, when we consider all the circumstances of Hawthorne's origin and career, this closing romance had its scene in Rome, and was partly written there. A young and marvellously pure New England girl, Hilda, in the story, witnesses a murder; and her mind and heart have hitherto been so stainless that the mere unwilling knowledge of this crime becomes to her a burden greater than she can bear. In reading the following extracts some allowance must be made for traces of the author's lingering prejudice:

"Rome," he says, in the thirty-seventh chapter, entitled "Altars and Incense," "has a certain species of consolation readier at hand, for all the necessitous, than any other spot under the sky, and Hilda's despondent state made her peculiarly liable to the peril, if peril it can justly be termed, of seeking or consenting to be thus consoled. Had the Jesuits known the situation of this troubled heart, her inheritance of New England Puritanism would hardly have protected the poor girl from the pious strategy of those good fathers. Knowing, as they do, how to work each proper engine, it would have been ultimately impossible for Hilda to resist the attractions of a faith which so marvellously adapts itself to every human need. Not, indeed, that it can satisfy the soul's cravings, but at least it can sometimes help the soul towards a higher satisfaction than the faith contains within itself. It supplies a multitude of external forms in which the spirit may be clothed and manifested; it has many painted windows, as it were, through which the celestial sunshine, else disregarded, may make itself gloriously perceptible in visions of beauty and splendor. There is no one want or weakness of human nature for which Catholicism will own itself without a remedy. To do it justice, Catholicism is such a miracle of fitness for its own ends, many of which might seem to be admirable ones, that it is difficult to imagine it a contrivance of mere man. Hilda had, therefore, made many pilgrimages among the churches of Rome for the sake of wondering at their gorgeousness, . . . , Restless with her trouble, Hilda now entered upon another pilgrimage among these altars and shrines. She went—and it was a dangerous errand—to observe how closely and comfortably the popish faith applied itself to all human occasions. It was impossible to doubt that multitudes of people found their spiritual advantage in it who would find none at all in our own formless mode of worship; which, besides, so far as sympathy of prayerful souls is concerned, can be enjoyed only at stated and too unfrequent periods. But here, whenever the hunger for divine nutriment came upon the soul it could, on the instant, be appeased. At one or another altar the incense was forever ascending, the Mass always being performed, and carrying upward with it the devotion of such as had not words for their own prayer. And yet, if the worshipper had his individual petition to offer, his own heart-secret to whisper below his breath, there were divine auditors ever ready to receive it from his lips; and, what encouraged him still more, these auditors had not always been divine, but kept within their

heavenly memories the tender humility of a human experience. Now a saint in heaven, but once a man on earth.... Often and long Hilda lingered before the shrines and chapels of the Virgin, and departed from them with reluctant steps.... Oftener than to the other churches, she wandered into St. Peter's. Within its vast limits she thought, and beneath the sweep of its great dome there should be room for all the forms of Christian truth; room both for the heretic and the faithful to kneel; due help for every creature's spiritual want.... Must not the faith that built this matchless edifice, and warmed, illuminated, and overflowed it, include whatever can satisfy human aspirations at the loftiest or minister to human necessity at the sorest? If religion had a material home, was it not here?"

Thus far, Hawthorne. The rest may be condensed in few words: Kneeling, by a sudden impulse, before a shrine adorned by a mosaic of St. Michael the Archangel, "she sobbed out a prayer that the burden of her spirit might be lightened a little." Then, nerved by this supplication, she entered a confessional and, heretic though she was, poured out the dark story which had infused its poison into her innocent life. Although the good Father discovered that she was a heretic, and so debarred from the full privilege of absolution, she experienced a vast relief, and said to him: "In spite of my heresy, you may one day see the poor girl to whom you have done this great Christian kindness coming to remind you of it and thank you for it in the better land."

That which impresses us most in all this is the intense, the intimate sympathy with Catholic faith and practice which Hawthorne developed; beginning by the lesson of repentance and open confession in "The Scarlet Letter," and ending with an illustration of the need of auricular confession according to the Church's forms and precepts. Hilda resisted the suggestion that she should accept the complete Christian faith, because, as she said, she was "a daughter of the Puritans." Other and actual daughters of the Puritans have since entered into the Catholic faith, and, judging by these remarkable passages from the writings of Hawthorne, who was held back by his environment, it is hardly more than reasonable to infer that if he were living to-day he, too, might very likely have become a Catholic.

At any rate, it is clear, even from our brief glance at a few books and men, that the religious element which we have noted as a powerful factor in American literature shines out in these recent authors as vividly as in the earliest, though in a different way. Descendants of the Puritans, they have removed themselves very far from the Puritan position, and have developed an emphatic leaning toward Catholic truth.

We had meant to say something more of Whittier, whom, despite his former fanatical outbursts at one time against Pius IX., we may all delight in for his beautiful pictures, in song, of American life and for the sweet natural religion that is in him. We can do nothing more, at this writing, than remind our readers that he illustrates this quality; and that in a number of his poems he wrote sympathetically and admiringly of Catholic themes and heroes.

Another great American, Ralph Waldo Emerson, sprung from a line of Congregational ministers, dropped into Unitarianism first and from this emerged as a Transcendentalist tinged with pantheism. Some of us owe him a great debt for his luminous, though detached, flashes of insight in merely human wisdom, his mental serenity, his original and exquisite but erratic poems. As a leader in philosophy or toward true religion, however, he is useless, being in these respects utterly devoid of ground principles or coherent thought. We do not wish to cast the least reproach upon the beauties of his mind. But it is pertinent to observe that while in him we have a grandson of the Puritans, who had deserted them as completely as Longfellow, Lowell, or Hawthorne did, Emerson carefully screened his eyes from Catholic truth. In the midst of the most exalted and spiritualized utterances of his "transcendent" thinking, therefore, we find him saying things so flat, so absolutely wanting in reverence or perception, that we are reminded of the legendary Greek whose wings of wax—just as he seemed about to fly upward to the sun-melted, and let him fall to the earth in ruin. For instance, Emerson has so completely lost the perception of sacred mystery that, in renouncing his Unitarian ministry, which still required some vague sort of belief in the Holy Eucharist, he says: "To eat bread and drink wine is one thing; to follow the precepts of Christ is another and a different thing."

Now it is very singular that two men among the strongest exponents of Catholicity in the United States, were converts, who before their reception into the Church had shared in this same Transcendental movement of which Emerson was an inspirer. These two men were Dr. Orestes A. Brownson and Father Hecker, the founder of the Paulists. Brownson, a prodigious student, a man absolutely sincere, who had explored all the sects and been part of some among them, but happily came to the wholeness of Catholic Christianity and, once arrived there, defended it with leonine force to the end of his life, was the greatest philosophic mind American literature has ever produced among the laity. He was the Daniel Webster among lay defenders of the faith. In the twenty massive volumes of his complete works he covered, or touched with a mighty hand, nearly every topic of vital interest that stirred the hearts and the minds of Americans, during his lifetime. He had lived and felt and clearly thought his way through all the misleading dreams, the doubts, the conceits and the illusions of omniscience which to the last kept Emerson spell-bound.

To Brownson, God and the soul were as real as any other object that he could perceive, with the faculties of perception born in man. From the broad view-point thus gained, in the bright illumination shed around him, he wrote comprehensively of democracy, of the Republic, of the Church, of the faith, and of literature. If one wishes to see how Emerson's philosophy disappears in the light of a greater star that shines only for the glory of God, one should consult Brownson's review of Emerson's poems, in the nineteenth volume of his works.

Of Father Hecker, the other convert just alluded to, we have a worthy record in Father Elliott's life of him; detailing a wonderful and devoted career, which was followed out plainly and simply in these present United States of ours. Brownson was a poor, adopted child who, early separated from his parents, educated himself and rose to be one of the foremost American lay advocates of Catholicity, in his generation. Father Hecker was a humble baker's apprentice of German origin, who—by a divine calling which, for years, he was unable to explain even to himself, and still less to his Methodist mother—came at last to be the founder of a new religious order, the Paulists, whose origin belongs to the United States and reflects credit on the Republic; and his "Questions of Nature" and "Aspirations of the Soul" form an interesting literary link between Transcendentalism and Catholicity.

Neither of these men can one find fairly represented, or, sometimes, even mentioned, in the current histories and handbooks of American literature. Why? Because they were Catholics! But, even if they be not in the handbooks, they still hold a high and permanent place in the literature and the life of the American people. Hecker lived at Brook Farm, as Hawthorne did. Brownson partly sympathized with Brook Farm for awhile, as Emerson did. Hawthorne gradually drew very near to full perception and acceptance of Catholicity. Emerson went farther and farther away from it, and was lost in the mist. Hecker and Brownson who had gone all through this same wandering movement, came out as American Catholics whose names and works will long be revered,

When we reflect upon all this, and upon the earliest days of our literature, does it not come upon the mind irresistibly that the old religious impulse, which was at the roots of the nation, grows up and flowers and dominates all, to-day, in spite of the materialism around us? The Catholic idea is not separate from the nation, and never was. It was here at the seed-time: it is here now. Hecker, Brownson and Hawthorne were all among the New England Transcendentalists, who—as Father Elliott tells us—"had indeed cut the root, but the sap of Christian principle still lingered in the trunk and branches and brought forth fruit which was super-

natural, though destined never to ripen." In Hecker and Brownson it did ripen gloriously; and in Hawthorne it came near doing so.

Cardinal Newman says: "There is a large floating body of Catholic truth in the world. It comes down by tradition from age to age. Men [outside the Church] take up and profess these scattered truths, merely because they fall in with them." Brownson and Father Hecker received the whole truth; not the fragments. Viewing them as a direct outcome of American life and thought in various lines, we may fairly conclude that they represent the influence which guides the needle and, amid all its oscillations and declinations, draws it back toward the polestar.

A word should be added, in this place, to call attention, albeit inadequately, to the presence in our literature of to-day of popular authors like Marion Crawford, John Boyle O'Reilly, Brother Azarias, Louise Imogen Guiney, Agnes Repplier and Katherine E. Conway—Catholic novelists, poets or essayists, all of them—who are but part of a growing phalanx that emphasizes, and will by and by emphasize still more the recurrence of Catholic inspiration in American letters; or, rather its abiding existence and indestructibility.

Returning now for a moment to the fact of the needle's variation, mentioned at the beginning of this paper, it is interesting to observe that Columbus, the discoverer of America, was also the man who discovered the one place on the globe where there is no variation of the magnetic needle from the straight line to the north. That place is two and a half degrees east of the Island of Corvo, in the Azores. Here in the United States our literature has been swinging and swaying from one point to another; yet, as we see, it has in some notable instances, within the last three hundred years, pointed first or last very closely in one religious direction; and more than ever, now, toward Catholic truth. May there not be a line of no variation that we shall yet reach? Another curious fact. The movement of the compass-needle occupies about three hundred and twenty years. Every great heresy from the Catholic Church, so far, has completed its swing and lost its greatest force in about that length of time. The Protestant division, with all its hundred and fifty subdivisions now existing in the United States, has been swinging here for something less than three hundred years. Perhaps we shall finally discover that the compass-needle of our American literature, after all, is controlled by a mastering tendency toward the pole-star of Catholic faith.

GEORGE PARSONS LATHROP.

MADAGASCAR AND CATHOLIC MISSIONS.

EW people in America are acquainted with the remarkable changes that have taken place within our own time in the great African island which for ages was only known to the world as the stronghold of foreign pirates and native barbarians. the Portuguese, the Hollanders, the English and the French have established their colonies all around the other coasts of the Indian Ocean, Madagascar alone among its islands has retained its independence and defied the efforts at conquest of Europeans. native population, long divided into a number of warlike and independent tribes as barbarous as the New Zealanders of the last century, has in our own days been formed into a single well organized state by the energy and conquests of the remotest of these The Hova tribe, originally settled in a district in the interior of Madagascar not exceeding the size of Massachusetts, has during the present century extended its rule over nearly the whole island, and founded an empire as extensive as Germany or France. The Hova conquest of Madagascar recalls the growth of the Ottoman Empire from a band of warrior shepherds to the greatest power of the world. The efforts of its native rulers to introduce European civilization into their country without sacrificing its independence are paralleled by the action of Peter the Great, of Russia, among his half barbarous subjects. Under both these aspects Madagascar and its people are well worthy of the historian's notice.

Though commonly spoken of as belonging to Africa, Madagascar is in reality as distinct from that continent as Australia is from Asia. The Mozambique Channel which separates Madagascar from the African mainland is not, indeed, over three hundred miles wide, but its depth is enormous, and geologists unite in asserting that there never has been any land connection across it. The native animals show no connection with the African fauna. The lions and great carnivora of Africa are wholly absent in Madagascar, as are the monkeys, the antelopes, the zebras, giraffes and other characteristic African animals which abound on the western shore of the Mozambique Channel. The chief native beast of prey in the Madagascar forests is the foosa, an animal scarcely larger than a domestic cat, but belonging to a distinct family of carnivora which has no representative elsewhere. The lemurs, or half apes, and other small animals belonging to the same zoological family

as the ant eaters of South America, are the principal native occupants of the Madagascar forests. In the eye of a naturalist it is a region almost as completely isolated from any other as is Australia, and this fact tends strongly to show that it never has had any connection with the African Continent.

Soundings of the Indian Ocean, indeed, seem to indicate that, in the distant past, Madagascar extended far to the east towards Ceylon, and some geologists consider that it is but the remnant of a mighty Continent, the bulk of which is now buried beneath the ocean like the lost island of Atlantis. Be this as it may, Madagascar is essentially a land apart from others, and it is not undeserving of the name of Island Continent, sometimes given it by its inhabitants.

In extent Madagascar equals several of the most important countries of Europe. It is as large as France or Germany, and except Borneo and Greenland, is the largest island in the world, properly so-called. It stretches nearly a thousand miles from north to south while its width is little over three hundred anywhere. In natural capabilities and conditions it somewhat resembles Cuba, but it has four times the area of the Pearl of the Antilles. Like it, it is traversed by great mountain ranges running through its whole length and forming the elevated plateau of Imerina in the centre of the island. This plateau, surrounded by granitic mountain peaks, and nearly seven thousand square miles in extent, has some resemblance to the valley in which the City of Mexico is built. Its altitude of four to five thousand feet above the sea level gives it a temperate climate under the tropical sky, and it is thickly peopled and well cultivated. It is the native home of the Hova tribe, which of late years has extended its dominion over most of the island, as the Aztecs, before Cortez, had conquered their neighbors from the Carribbean Sea to the Pacific Ocean. The slopes of the mountains are covered with primitive forests forming a belt at least forty miles wide all around the island and only traversed by trails or bridle-paths. Road-making, though generally recognized as the most efficient material agent of civilization, is much discouraged by the native rulers on political grounds, and journeys in Madagascar have to be made in palanquins (or filajanas, as the native term is), on the shoulders of porters. A similar jealousy of foreign immigration has kept the gold fields which are known to exist in the country from being worked. to any great extent.

The population of Madagascar is not more African than its geological history. Its numerous tribes all belong to the Polynesian or Maori race, which has peopled all the islands of the Eastern Archipelago and of the Pacific Ocean north of New Guinea and

Fiji. Their language is closely allied to that of Hawaii and the New Zealand Maoris, and with local peculiarities it is one throughout the whole country. As in many of the Polynesian groups, the color of the Malagasy (the national term for the people) varies considerably from black to that of Southern Europeans. The Hovas of the interior are often of the same complexion as Spaniards, or Italians, while among the coast tribes the color is as dark as that of the natives of India. In no case, however, are the well-known features of the negro race predominant. Negro slaves have been brought from Africa in considerable numbers at various times; but they do not seem to have modified the national type of the Malagasy much. Whether the first Malagasy settlers found a darker race established in the country with which they have amalgamated, as has happened in some of the Pacific groups, is an open question, but at present the whole population forms but one people in race though divided into different tribes, as the Hovas, the Sakalaves, the Betsileos, the Betsimarakas and others. The mental capacity and social organization of the Malagasy race is much above that of the Negroes of Africa, and is similar to that of the Malays of the islands between Asia and Australia. sonal energy and courage they are as much superior to Southern Asiatics as they are to the Negroes in material civilization. The Malay rovers of the Eastern Seas played for centuries a part like that of the Norse Vikings in Western Europe, between the eighth and eleventh centuries. Though no nation of the Malay or Polynesian race has ever founded a great empire, none has ever submitted to slavery, and at the present day they hold almost undisputed possession from Madagascar to Hawaii and from Easter Island to the China Sea.

Though Madagascar lies in the direct track followed for centuries from Europe to India, its relations with the Western World have been very slight until recently. The Portuguese, while they controlled the coasts of India and Eastern Africa in the sixteenth century, only named a few points along its coasts. The French in the following century established several stations for trade in Madagascar and claimed a dominion over the island in accordance with the elastic code of international law in vogue, which made the territories of uncivilized races the prize of the first comer. In the reign of Louis XIV. several factories, including the present town of Tamatave, were established by the French, and the whole island, though unexplored, was claimed as a French possession, and generally regarded as such by the other powers of Europe. During the eighteenth century those stations were neglected by the government, though the governor of the Island of Bourbon bore the title of Governor of Madagascar. The wars of the French Revo· lution stripped France of all her colonies. The islands of Bourbon and Mauritius were captured by the English fleets, and at the Peace of Vienna England retained the latter while restoring the other captured colonies of France. Shortly afterwards, however, the English Governor of Mauritius claimed that the old French posts in Madagascar were a part of his jurisdiction, and sent an expedition to secure a footing in the island. Diplomatic negotiations were at once opened by the French Government, and finally, in 1816, the British Ministry was obliged, by the terms of the treaty, to renounce openly all pretensions over Madagascar.

Though thus baffled, apparently, Governor Farquhar, with the characteristic greed of territorial acquisition which has always marked the policy of England, continued his attempts to secure a foothold in Madagascar. A new power had arisen in the island during the latter part of the eighteenth century. The relations of the French with the natives had been confined to the coast tribes, known as Sakalaves and Betisimarakas. A tribe, the Hovas, long established in the central plateau of the island, and hitherto unacquainted with the French or any other Europeans, rose to power in the latter half of the eighteenth century, and had extended its dominion to a part of the coast at the time when Bourbon and Mauritius were occupied by the English forces. The Hova kingdom was founded by a warlike chief, bearing the formidable name of Andrianama Poinimerina, and became a conquering power under his rule and that of his successors, though on a limited scale. One of these, an enterprising and ambitious young man, known as Radama I., mounted the Hova throne in 1810, at the age of eighteen, at the time when the English navy was paramount in the Indian Ocean. Radama was keenly desirous of extending his empire over the whole island, and for that end he was anxious to obtain the help of European arms and military training. Governor Farquhar found in this disposition of the Hova king a favorable opportunity for getting a foothold in Madagascar for English influence. He sent agents to Tamatave, offering to supply the Hovas with the much-desired arms; and scarcely had the British government recognized the jurisdiction of France over the island than the governor of Mauritius made a treaty with Radama acknowledging him as supreme monarch of Madagascar, and furnishing him with arms and military instructors to enable him to conquer his independent neighbors. To give a philanthropic color to this peculiar transaction, it was stipulated that Radama should prohibit his subjects from engaging in the slave trade by sea. The abolition of the slave trade by the British navy had become a popular policy in England since the trade in question had ceased to be profitable to British merchants. It admirably combined philanthropy and profit. It gave British cruisers an opportunity of practising in African and Asiatic waters the right of search, which the war with this country had ended elsewhere in 1814. At the same time, it gave a plausible pretext for seizing on coveted territory in the name of humanity. The treaty between Governor Farquhar and Radama, in 1818, which was duly ratified later by the home government, is a good instance of the practical workings of British philanthropy in politics. The slave trade by sea from Madagascar was limited in extent, as the natives owned little shipping. Moreover, as the Hovas had at the time a very limited coast territory, the trade in question was practically not under their control. The abolition of the slave export, however, formed a colorable pretext in Europe for acknowledging the Hova chief as king of Madagascar, and securing a foothold in the island by his alliance. In consideration of this end, Radama was furnished with the means of inaugurating slave raids throughout the island on an unprecedented scale, and in establishing a kind of Turkish despotism over the hitherto independent population of Madagas-It is significant of the true value of the philanthropic side of the treaty that, two years later, the slave trade by sea was openly restored by Farquhar's successor as British governor. The object of securing British influence in Madagascar had been secured, and the British governor saw no need of further keeping up the pretext on which it was first obtained.

The military superiority which English arms and officers had given to the Hovas, made Radama desirous of introducing European civilization further among his subjects. The Malagasy were illiterate, like most Polynesian tribes, and their language had never been reduced to writing. The king determined to end this state of affairs by founding schools in his capital. His English visitors recommended the employment of Protestant missionaries as teachers, and the London Missionary Society, in 1820, sent out several, who were well received in Tananarivo. Radama and his people had no definite system of religion like Mohammedanism or Brahminism. Their ideas of God and the future life were vague. and though some idolatrous rites were practised, there were neither temples nor a priesthood in Madagascar. A belief in witchcraft was the strongest superstition among the Malagasy, and the barbarous ordeal of the tanguen was their most important rite of a religious character. The tanguen, so named from a plant of the species of nux vomica which was used in its practices, consisted in obliging accused persons to clear themselves of the charges brought against them by swallowing a poisoned draught. If they were able to vomit the poison they were held innocent, but if not, death was the penalty. The executions for this cause among the

Hovas were on a scale of enormous magnitude. Whole villages were often obliged to submit to the ordeal at the whim of a Hova governor, and thousands were sometimes butchered in consequence. The punishments were also excessively barbarous. Death was inflicted in various forms. One punishment consisted in scalding by boiling water; another was burying alive; and a third was hurling from a precipice near the capital. Radama, though merciless in his conquests, felt a natural repugnance to the barbarities of the tanguen code, and forbade its practice, when fully established in his kingdom. He thus set himself, to some extent, against the native superstitions, and on this account he the more readily accepted the Protestant missionary teachers on simple motives of state policy.

The English missionaries, on their side, showed little desire to teach any distinctive form of Christianity. They chiefly occupied themselves in founding schools to teach reading and writing, and when these were acquired the Bible as a class-book was supposed to convey all the Christianity needed. Radama and his nobles, in fact, regarded Christianity as synonymous with the power of reading books, and, at a late period his successor declared the profession of the first and the possession of printed books equally unlawful. Radama himself, however, cordially favored the establishment of the mission schools, and numbers of the nobles sent their children to them. It is estimated by the Protestant missionaries that over ten thousand natives learned to read in the fifteen years that the schools continued. The name of Christian was commonly given by the natives to these pupils, though few professed any definite Christian belief. The influence and power of England, however. was strongly impressed on the minds of the young Malagasy pupils by the missionaries, and their efforts in this direction afterwards produced striking results.

On the death of Radama I., in 1828, a reaction set in against the foreign customs introduced by him. His widow, Ranavalona, succeeded him. She was a woman of remarkable energy and intelligence, and she had a profound distrust of European interference in Madagascar. The tanguen ordeal was again made law by the royal authority, and Christianity in any form was proscribed-

The English ministers were expelled in 1835, and a policy of non-intercourse with strangers adopted by the queen. She was in her own way both an energetic and a politic ruler, and during her reign of thirty-three years she materially extended and consolidated the power of her dynasty throughout Madagascar. Her authority was enforced by barbarous punishments. On one occasion no less than five thousand persons were forced to pass the ordeal of the tanguen, and thousands of families were exterminated

or reduced to slavery on mere suspicion of disloyalty. Nevertheless, Ranavalona retained her sway undisputed and even with the respect of her people until her death in 1861. To the end of her reign Christianity in any form was as rigorously proscribed in Madagascar as in the old Roman empire in its persecuting days.

Catholic zeal did not wait for royal invitations to attempt the conversion of Madagascar. That task indeed had been attempted more than two centuries before, and amongst its promoters was no less a person than St. Vincent de Paul. A bishopric had been established in Madagascar in the seventeenth century, and though the missions had been destroyed by the wars of the natives, the hope of the restoration was never abandoned. In 1844 a French priest, M. Dalmont, undertook the task, and was named Pro-vicar Apostolic of Madagascar by the Holy See.

The Hova dominions were closed against Catholic missionaries as well as other Europeans, but the Sakalaves of the coast were still independent, and among them Father Dalmond founded his first mission in 1845. The early years of work were beset with countless trials; mission after mission was ruined by the wars of the native chiefs, and the deadly fevers of the coast cut off the missionaries at an unexampled rate. Father Dalmond died in four years after his arrival, and his successor, Mgr. Monnet, was carried to the grave a few hours after landing in his mission. The Holy See at the urgent advice of Father Dalmont decided on placing the Madagascar Mission in the hands of a religious order. The General of the Jesuits accepted the charge, and the French province of that order undertook to carry on the mission in 1848, and has done so ever since.

The French Jesuits set to work with all the zeal and system which are the common qualities of Jesuit missions. Besides establishing churches and schools at suitable points along the coast, they founded a large industrial school in the island of Reunion or Bourbon, to which promising pupils were sent to learn trades and the ways of civilized life which they might afterwards bring back to Madagascar. A normal school for training native school teachers and a seminary for native students for the priesthood was also established in Reunion. The Sakalave tribes were in such a disturbed state from wars among themselves and incursions of the Hovas that the work of conversion was very slow for years. Churches and schools were scarcely founded when destroyed again, and only three establishments were able to enjoy a permanent existence at St. Mary's, Nossi Be and Mayotte. Such was the state of the Madagascar Mission sixteen years after its foundation. The results appeared small for the labor expended by the missionaries, but such has been the common lot of the Church on her first entry to most of the lands where she now holds sway.

An important change in the political conditions of the island occurred in 1861. Ranavalona, the great Hova queen, died in that year at the age of eighty, and her son Radama II. signalized his accession by abolishing the laws against Christianity and opening communications with the nations of Europe. Embassies were received from both France and England, and the London Missionary Society was invited to resume the work it had carried on under the first Radama. All the old establishments of the Protestant Mission were restored to the new comers by the government, and the English ministers at once found themselves in high influence at the Hova capital. Father Webber, the Superior of the Jesuit Mission, at once took advantage of the new order of things and went to Tananarivo where Radama II. received him well and granted a site for a Catholic church and school. The Hova popution, more civilized than the coast tribes, showed a marked tendency towards the reception of Catholicity. A congregation of native converts was formed in a few months and continued to grow rapidly. The king and queen, though pagans, showed a strong inclination towards the Church, and Radama addressed a respectful letter to the Holy Father on his accession.

The most serious opposition to the progress of conversion came not from the people but from the English Protestants and their partisans. The English Protestant schools in the Hova capital had been closed since 1835, but during their existence a number of pupils had been educated in them, and many of those belonged to the dominant aristocracy of chiefs. Under the despotic rule of Ranavalona the profession of Christianity was strictly forbidden, but a certain bond of sympathy continued to unite the former pupils of the English schools. On the accession of Radama II. and his revival of his father's policy, these men, both by rank and conformity with the king's ideas, obtained a very large share of power in the government. The court felt the need of European instruction to carry out its projected work of civilization which it had taken up, but it wavered between the influence of French or English guides. The French protectorate over the coasts of Madagascar was an obstacle to the extension of the Hova rule over the whole island which was a ruling principle of their policy. On the other hand, France had never made any serious attempt at conquest or colonization in Madagascar, and it seemed quite possible to secure the objects of the native policy by friendly treaty with France. Regarding the question with a view to the natural and just wish of the Malagasy to retain their independence and possession of their country, a French alliance appears to an unprejudiced observer to be the best for native interests. Though neither England nor France has displayed much regard for interna-

tional rights in their dealings with less civilized races, it is undeniable that the lot of the latter under French influences has always been better then when brought into contact with English policy. The differences in the fate of the American Indians in Canada and in the former English colonies is a striking example. The result to the Maoris of New Zealand of English intercourse under missionary auspices is another, when compared to the conditions of a similar race in Tahiti or Mangareva. It could not be expected however that the Hova king or his advisers should be acquainted with the general facts of modern history, and so the idea of securing the empire of the island by English aid was readily accepted from the new English missionaries by a large body of the chiefs. The Protestant Mission became a centre of English political influence in Tananarivo, and its members used this influence to attack the Catholic Church in its beginnings. The Catholics were described as idolators and their priests as French political agents, while at the same time their poverty was contrasted in the usual tone of Protestant religious argument with the abundant resources of the English missionaries. The peculiarly English system of religion which makes the sovereign supreme head of the Church, was also, it was urged, exactly the thing suited for Madagascar in a political sense. The argument was a strong one to a dominant class which chiefly sought in Christianity the benefits of material civilization without any loss of its own dominion, and it had great weight among the Hova nobles.

Radama II. and his queen were personally favorable to the doctrines of the Catholic Church, and sent their nephews and niece to be trained in the Catholic schools. Though absolute monarch in theory, Radama was unable to retain the power which his able mother had so long exercised. A conspiracy was set on foot against him after a few months, the motives of which are veiled in much obscurity, but of which the result was the murder of the king by a band of armed men.

It is not easy for a foreigner to trace the internal policy of the Hova monarchy, which is shrouded in much mystery. The death of Radama seems to have resulted in giving the aristocracy more power and making the sovereign practically a mere figure-head in the government. Radama's wife, Rasoerina, was proclaimed queen, but the practical government of the country was vested in the commander of the army, who was made prime minister. This peculiar arrangement, by which a mayor of the palace is virtually sovereign, has been ever since retained in Madagascar.

The tragic death of the king did not change materially the policy of the Hovas in regard to European intercourse. Rasoerina and her minister showed themselves equally favorable to the

Catholics and to the English Protestants. But her reign was a short one; for she died in 1868, having received baptism from a Catholic friend in her last illness. Her sister succeeded to the throne under the title of Ranavalona II. The new queen decided to adopt Christianity as the state religion on grounds of a purely political nature. The old pagan rites were abolished, and the king, queen, and prime minister were privately baptized in the palace by a native Protestant preacher, but no definite creed was adopted beyond the name of Christianity. That was all the Hova progressive party desired, and freedom of selecting any form of Christianity was proclaimed for all the queen's subjects. Madagascar, however, had henceforth a state religion which, if it had no other dogma, had at least the distinctive features of being not the creed of the Catholic Church.

The nominal acceptance of Christianity as a matter of policy by a race indifferent to its doctrines or practices is not an unprecedented occurrence. The Dutch Calvinists enrolled some hundred thousands of their subjects in Ceylon as Protestant Christians during their dominion in that island, but the nominal Christianity disappeared with the last Dutch governor. Taeping chiefs in the last great rebellion in China also once proclaimed themselves followers of Christianity, but no subsequent traces of its existence among them have since been discovered. During the last year, General Booth, of Salvation Army reputation, also enrolled a number of Natal Zulus as Christians on their consent to accept the name and profess their willingness to be saved. The general graciously permitted his converts to continue their old practice of polygamy as a mere detail quite immaterial to Christian morals. The Christianity established as the state religion by the Hova court was of an equally accommodating kind. tendance at church on Sundays and calling themselves Christians are the only requirements of Malagasy Protestant Christianity. To secure the former, it is the regular custom for the Hova governors of districts to act themselves as preachers, and in the court chapel the English missionaries are not allowed to officiate except by special invitation. Vague, however, as are the doctrines of the Hova state church, its importance as a political engine of government is very considerable, and its establishment has been a serious impediment to the general acceptance of Catholicity by the natives.

It is true that Ranavalona II., when establishing the new state church, publicly announced that all her subjects were free to choose their religion at will. The freedom of religion thus announced was, however, in practice moulded on the lines of toleration granted by England to Catholics at the close of the last cen-

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tury. All government offices were reserved for the professors of the queen's religion, as well as all preferments in the army. The population at large was compelled to erect Protestant churches and schools wherever ordered by the ministers, while even the liberty of purchasing sites for Catholic churches could only be obtained with the greatest difficulty and after long delays. The officials frequently commanded the population in various districts to attend the Protestant churches, and though refusal to do so was not a crime by the law, it exposed the recusants to very serious consequences. The Hova government is as absolute as the Turkish, and it claims the right of forced service on the public works from its subjects at the queen's discretion. If a native should incur the ill-will of a governor, he is liable to be ordered off to work without pay in a distant province for many months. Two laws which have since been enacted go still further in abridging the liberty of conscience promised by the queen. The law of compulsory military service obliges every native Hova to spend a couple of years in the army; but the pupils of Protestant schools, as well as Protestant preachers and teachers, are specially exempted from this duty. Another law requires the attendance of all children of a certain age at school. The parents may send their children to a Catholic school if such exists in their neighborhood, but otherwise they must send them to the Protestant schools, in which hostility to the Catholic Church is taught carefully if no other dogma is. Moreover, it is forbidden to remove any pupil from the Protestant schools if once entered in them. Practically, this law is much the same as that of Russia, which, while nominally granting freedom of conscience, prohibits, under the severest penalties, any member of the state church from changing his form of religion. It is not hard to comprehend how such laws must tend to prevent a halfcivilized pagan race from accepting Catholicity. In spite of these obstacles, however, the Jesuits of Madagascar, within twenty years from their arrival in Tananarivo, had formed a Catholic population of no less than eighty thousand, and established schools in which twenty thousand pupils were receiving an education in 1882.

This result is the more remarkable as the Catholic missioners had to contend not only with the ill-will of the Hova government and its English advisers, but also with the direct hostility of the rulers of France, from whom one might have supposed they would naturally look for protection as French citizens in a foreign land. At the moment when the French Jesuits were forming a Catholic population in Madagascar, at the cost of the greatest personal sacrifices, the order to which they belonged was expelled from France by a majority in the Republican Legislature. The natural effect of this tyranny was to cut off the supply of priests imperatively

needed by the growing mission, and at the same time to put the French priests in Madagascar at the mercy of their English opponents. The intolerance of the anti-Catholic politicians in France went further, and in 1881 the industrial schools and seminary in Reunion, which had been for twenty years the great means of spreading Catholicity and civilization among the Malagasy, were suppressed by the government at the demand of the Radical representative of Reunion in the French Corps Legislatif. The apparent motive of this high-handed act of oppression was to ruin the Catholic missions. In a political point of view, it was the severest blow that could be dealt not only to the religious welfare of the natives but also to French influence in the island. The Catholic priests had kept themselves strictly aloof from politics, but their personal character and their zeal for the welfare of the natives had won them the highest respect among all classes of the Malagasy population, as any unprejudiced resident can testify. The personal character and work of the French Jesuits had done more than any other agency to raise the national character of France in the eyes of the natives, and yet they were publicly branded as outlaws by their own government without a trial. an American it looks as if reckless antipathy to the Catholic Church, and more especially to the Order of St. Ignatius and St. Francis Xavier, were a stronger motive of action with the dominant politicians in France than regard for the national interests of their country. As far as lay in their power, they handed over the Hovas to the control of the English missionaries by their anti-Jesuit legislation. That the mission has survived their hostility is an undoubted fact, but its survival must be attributed to a power outside of and above the men who controlled the politics of the French Republic.

The expulsion of the Jesuits from France and its colony was the signal for increased hostility on the part of the Hova government towards the Catholics in its dominions and also for a marked growth of the influence of the English missionaries with the court. A police force was organized from discharged soldiers, and part of its duties was the enforcement of attendance at the Protestant schools and even churches. The French instructors who had been employed in the Hova army were discharged and replaced by English officers. Obstacles were multiplied to the opening of Catholic schools and churches, and the French priests were subjected to numerous vexations by the officials. By a singular course of events, however, this double attack on the Catholic Church brought on a quarrel between the two assailants. The Hovas interpreted the attack of the French government on the Jesuits as a sign of their fear of offending the power of England, to which it

had lately abandoned control of Egypt. Encouraged, it is said, by the advice of some members of the English mission, the queen sent messages to some of the Sakalave chiefs, who were under French protection, ordering them to submit to her own authority. Two complied; and this contempt of French claims roused the national feelings of the French government. There were other causes of dispute already existing, one being the repudiation of the treaty made in 1868, which guaranteed Frenchmen the right to acquire land in the Hova dominions; and another, the claims of the heirs of a Frenchman whose property in the island had been sequestrated by the queen. The Hovas had grown contemptuous of French power, and refused any satisfaction. In consequence, war was declared, in 1883, by France. The government of Ranavalona thereon expelled the Catholic missioners in a body from its territory. For two years the Catholic population was left without priests or Church government. Under those circumstances, the courage of the newly converted natives was most remarkable. The great majority continued to assemble in their churches at the usual time of public worship. And they were not to be driven from the practice even by threats of massacre, which were frequently made during the continuance of hostilities. One lady of high rank, the widow of the prime minister's son, particularly distinguished herself. She had been a constant attendant at cathedral both before and during the expulsion of the Jesuit missionaries; and on one occasion, when it was announced that cannon had been trained on its doors, she took her place in the centre of the building, opposite the front door, where the first discharge of artillery was expected to take effect. The alarm proved a false one, and the government did not push its hostility further, but the occurrence gave a striking proof of the spirit which animates the recently converted Catholies of Tananarivo.

The war between the Hova kingdom and the French republic lasted nearly three years, without any very extensive hostile operations on either side. The Hova government tried unsuccessfully to effect an alliance with England or Germany, and the French occupied the ports of Tamatave and Majunga. The Queen Ranavalona II. died in 1884, and a relative of hers was chosen to fill the throne under the same name, and married the husband of her predecessor, who continued to rule as prime minister. A peace with France was finally arranged in 1885. By its terms the control of the foreign relations of Madagascar was conceded to France, and an indemnity of two million dollars promised for damages sustained by French citizens and others during the war. Frenchmen were guaranteed full freedom to reside in the country, and the same was secured for the professors of the Catholic religion,

whether French or natives. Thus, by the irresistible force of events, the rulers of France found themselves compelled to demand from a foreign and half-civilized nation that very liberty of teaching and preaching for the Jesuits which they denied them in their own land.

The protectorate over Madagascar, as far as other nations are concerned, thus conceded to France, has been explicitly recognized by Lord Salisbury's government in 1890. The consideration given to England was the recognition of her suzerainty over the island of Zanzibar, which she had previously seized on. Of the moral character of the Anglo-French convention, by which either party renounced the right to the territory which did not belong to either, it is unnecessary to say anything here. The withdrawal of England from any pretence to meddle in the affairs of the Hova kingdom is at least a distinct gain to the well-being of Madagascar, both in a political and a religious point of view.

In point of religion, Madagascar is to-day in a state of transition. The greater part of its territory has been brought by conquest under a single central government, but the authority of that government, outside the dominant race, is entirely dependent on force. The other tribes of the island, numbering three-fourths of its population, retain their native rulers and customs under the control of Hova garrisons, but are no way amalgamated into a single nation with their conquerors. The dominant aristocracy of the Hova monarchy has adopted a nominal Christianity as its state religion, and its policy is to make it general among the people by a compulsory school-law and the monopoly of government patronage in the hands of professors of the queen's religion. This system, more or less modified, has now been in practice for twentyfive years, and has been supported by large contributions of English funds in the hands of the various Protestant missions. Last year the official census gave the attendance at the state schools as one hundred and twenty thousand, but, nevertheless, the people at large show no inclination to adopt a Protestant form of Christianity as their belief. The whole number of Protestant church members was only returned at one hundred and twenty thousand among a population of from five to six millions. The official returns class about two hundred and fifty thousand more as nominal adherents of the different Protestant churches, and what that means in a country where the power of the chiefs is practically unlimited, and attendance at prayers enforced by the police, may easily be judged.

The Catholic missionaries during the same time, despite the opposition of the government and the nobles, and with no resources but the alms of the Propagation of the Faith and their own zeal, have founded four hundred congregations and brought a population of one hundred and twelve thousand persons to the Catholic faith. The whole staff of the mission consists of one bishop and forty-eight priests, with nineteen Christian Brothers and twentyseven Sisters of St. Joseph de Clugny to superintend the work of education. Their whole revenue is derived from foreign charity. and does not exceed forty thousand dollars annually,-less than that of many parishes in New York or other American cities,-yet with that they have founded and maintain five hundred and forty schools, conducted by native teachers, and giving schooling to fifteen thousand pupils. We may add to the schools a college, a hospital for lepers, where one hundred and fifty unfortunates are supported and treated, four free dispensaries, an observatory, and a Catholic publishing house as other works of the Jesuits in Madagascar. That the Catholics formed by them are no mere lip servers, their conduct during the two years of the Franco-Malagasy war, when they were left entirely without priests, is the best proof. What will be the religious future of Madagascar, it would be premature to assert absolutely; but it looks very much as if, at no distant date, it is destined to become a Catholic nation when the present state religion has run the normal course of other similar attempts to mould the revelation of God to the political ends of man.

BRYAN J. CLINCH.

MORE LIGHT ON THE ELECTION OF URBAN VI.

R. LOUGHLIN'S able paper on the Great Schism of the West, published in the CATHOLIC QUARTERLY REVIEW some time ago, has directed the attention of many of its readers to that unfortunate struggle. The Great Schism is one of the most pregnant events in the history of the Church. Its origin, especially, is of more than purely historical importance. Accordingly, Gayet's work on the Great Schism of the West, which furnished much of the material in Dr. Loughlin's article, led to further research by distinguished Catholic scholars in Europe. Prominent among these investigators was Prof. Ludwig Pastor, the distinguished historian of the Popes. His labors were not in vain, Every page of the new revised edition of his "History of the Popes" that deals with the election of Urban VI., bears witness to his industry and success. Not only do we meet with constant references to Gayet, Fincke and other authorities, but he has brought to light several new documents of unusual importance. With these, it is our intention to make our readers acquainted.

The most important piece of new evidence produced by Pastor is a letter of Cardinal Robert of Geneva, a member of the conclave that elected Urban VI., and afterwards anti-Pope under the name of Clement VII. It is addressed to the Emperor Charles IV., and dated at Rome on the 14th of April, 1378, six days after the election of Urban, and almost four months before the publication by the seceding Cardinals of the manifesto of Anagni (Aug. 9, 1378). It is needless to dwell upon the importance of this document. The author, one of the Cardinals who were present at the famous Conclave, in view of his subsequent career, cannot be charged with undue partiality to Urban. He was not some gossiping courtier. but a man of dignity and authority, in fact one of the foremost members of the Apostolic College. The letter is addressed to the What better guarantee could we have that it was written with care and deliberation and with due regard to the truth? The date of the document, also, is a claim to our confi-It was written on the 14th of April, 1378. Six days had passed since the wild scenes of excitement and confusion that attended the Conclave. The passions of the mob had been calmed since the oth of April; peace and order had reigned at Rome since that day on which the Cardinals who had fled to the Castle of St. Angelo, joined the newly-elected Pope at the Vatican. Urban's authority was of too recent creation to make him an object of fear to the Cardinals; he was not yet crowned nor installed as Bishop of Rome in the Lateran. That ceremony took place on Easter

Sunday, April 18th, four days after Robert's letter was written. Even so impulsive a man as Urban VI., was unlikely to resort to threats and violence before his coronation, though we know from Deitrich of Niem that he broke loose the day after. It is safe to assume that the letter was not dictated by fear and force; on the other hand the writer was as yet free from the passions and feelings that later set him up as the the opponent of Urban. We see that everything about the letter, the author, the address and the date, stamps it as a document of exceptional importance. We shall now let the document speak for itself; it is contained in "Codex Vaticanus," 4924, p. 1., and reads as follows:

(Letter of the Cardinal of Geneva on the nomination and election of our lord Pope Urban the Sixth):

"Most serene Prince and dearest Lord cousin: after the decease of our Lord Pope Gregory XI., of happy memory, which I announced to your Serenity in tearful terms in a former letter, when, ten days having elapsed after his death, according to the rule prescribed by the Canon Law, the other Lords Cardinals who were here and I were shut up in conclave, we unanimously cast our votes for the Archbishop of Bari then, the supreme pontiff now, by birth a Neapolitan, who was acting for my lord, the Cardinal of Pampeluna, Apostolic Vice-Chancellor then absent, in the curia of the said my lord, and on the eighth of the month in conclave we elected him to the apostleship, there being a delay of a single night only, because the Romans would not agree to a longer delay in the said Conclave. He was called Urban VI., being Magister domesticus et apostolicus, before his elevation, although now raised from the lowest rank to the highest. His coronation has been set for the feast of the Resurrection of our Lord, which is close at hand, Now he (Urban VI.) has great hopes of Your Serenity, and thinks that as Your Serenity has always been a son and a helping arm to his predecessors, Your Majesty ought to continue to be likewise to him. And I find him very well disposed, both in matters touching Your Serenity and your Most Serene Son, about whom I have several times conversed with him most earnestly; so much so that if he will carry out what he said, as I hope will be the case, he will happily despatch the business of your said Most Serene Son. To bring this about I shall not fail to urge him with all my endeavors, and to this end Master Conrad, the Secretary of Your Serenity, is working in a praiseworthy manner with all his skill. I always commend myself to Your Serenity, whom may the Almighty preserve happily and in conformity with my wishes. Written at Rome on the 14th day of April."

On account of the importance of the document, our readers will be pleased to have the Latin original. (Litteral Gebennensis ad imperatorem Karolum de commendatione et creatione domini Urbani pape sexti):

"Serenissime princeps et domine consanguinee Karissime, Post felicis recordationis occasum domini nostri Gregorii pape XI., quem per alias litteras meas serenitati vestre lacrimabiliter nunciavi, aliis dominis meis cardinalibus et me hic existentibus, revolutis X. diebus post obitum secundum iuris canonici ritum, clausis in conclavi in archiepiscopum Barensem tunc, nunc summum pontificem, natione Neapolitanum, qui domini mei cardinalis Pampilonensis vice-cancellarii apostolici absentis vices gerebat in curia dicti domini² mei et cetera unanimiter direximus voces nostras eundem ad apostolatum eligentes VIII. die mensis huius in conclavi solummodo unius noctis⁸ mora protracta, quod Romani in longioris temporis in dicta conclavi moram consentire noluerunt. Vocatus est Urbanus sextus m[agister] dum erat in minoribus, domesticus et apostolicus quamvis de gradu infimo nunc sublimatus ad supremum, cuius coronacio in paschate resurrexcionis domini proxime venture. est ordinata celebrari. Ipse enim de serenitate vestra multum sperat et quod sic aliis predecessoribus suis eadem serenitas filia fuerit et iuvaminis brachium singulare sic in eum constanter debeat maiestas vestra. Et quonium tum et4 in factis tangentibus serenitatem vestram et serenissimum natum vestrum super quibus cum eo strictissime pluries sum locutus ipsum reperio dispositum valide bene adeo quod si opera verbis confirmaverit, sicut spero, negocium dicti serenissimi nati viri feliciter expediet. Ad cuius expedicionem toto conamine meo ipsum sollicitare non desistam, in quibus et Magister Conradus serenitatis vestre secretarius cum omni sollertia commendabiliter laborat, recommendans me semper serenitate vestre, quam conservet Omnipotens feliciter et votive. Scriptum Rome die XIII. Aprilis."

This letter, the reader will observe, while adverting to the pressure brought upon the Cardinals to shorten the conclave, gives not even the slightest hint of any violence curtailing the liberty of the participants. Moreover, the relation of the writer to the new Pope, as set forth therein, excludes the idea of the letter having been written under intimidation. He speaks of several confidential conversations with Urban and suggests to the Emperor that he is not without influence with the newly-chosen Sovereign pontiff. Not a word in the document suggests a doubt of the legality of his election.

But is the document authentic? Its preservation in the Vatican Library is in itself an argument in favor of its authority. But



¹ Ruperti is added by a later hand in other ink.

² Cardinalis is written above in different ink.

In the MS. spacio is added in different ink.

⁴ In the MS. est.

this is not the only argument that Pastor submits. A "Chronicle of the Popes of the Fifteenth Century," published by Fincke in Mgr. De Waal's Romische Quartalschrift für Archæologie and Kirchengeschichte, vol. iv., pp. 340-62, contains an account of the rise of the Great Schism, which betrays undoubted acquaintance with our document. "In his day," says the chronicler, "began a most serious schism, because after his election some Cardinal wrote to the Emperor Charles that 'Urban has been unani mously elected on Thursday, the 8th of April, and that on account of the Romans they had remained in conclave only one night,' and answered the aforesaid Emperor, who was then pressing him to raise his son Wenczelaus, now king of Bohemia, to the dignity of Emperor, that 'they would work towards this end with all their endeavors.' This letter is most carefully preserved in the archives of our side." 1.

A speech intended to be delivered by Lamprecht, bishop of Bamburg, on behalf of the Emperor Charles at the imperial diet in the year 1378, also mentions letters written by Cardinals on Urban's election. "And on this point," says Lamprecht, "the Emperor has the letters of many Cardinals, some of which are autographs, and which the Emperor has ordered to be carefully preserved."

The authenticity of our letter is fully established by these citations. To make assurance doubly sure, Conrad of Wesel, the imperial ambassador mentioned in the letter, a bitter partisan of Clement VII., also refers to the document.² But Conrad impugns its value as testimony, by declaring that the letter was written under stress of intimidation. Urban, says Conrad, ordered Robert of Geneva to write the letter some time after his coronation, and in it to give an account both of his canonical election and of his coronation. Now the letter bears date April 14th; the coronation took place April 18th; Conrad's statement of the contents of the letter is incorrect, therefore, in a matter of great importance. He cannot have had a true copy of the document before him, or if he had, his truthfulness must be measured by his accuracy. Indeed, Conrad's statement was made a considerable time after the occurrence in question, and his report is dictated by profound partisanship. In view of its incorrectness and animus, therefore, and the date of its preparation, Conrad's report is entitled to little credence. If to this we add the internal evidence of Robert's letter, which, as we have seen above, represents the writer as on confidential terms with the Pope, it seems too strong an imputation on the character of Robert as a man to believe that his letter was dictated by fear.

¹ Fincke, Chronicle of the Popes, 347-8.

¹ Gayet, ii., P. J., 169 ff.

Pastor has found another document of much importance, bearing upon the election of Urban VI. This he purposes to publish in full before long, but he has made considerable use of it in his version of Urban's election and the events immediately succeeding. It is a report of Bishop Nicholas of Viterbo. In it he gives the opinion of the Cardinal d'Aigrefeuille, who like Robert of Geneva, had been a member of the conclave. The bishop's words are as follows:

"I went to my lord the Cardinal d' Aigrefeuille and begged him to tell me the truth for the salvation of my soul, because I did not intend to acknowledge as Christ's vicar one who was not Christ's vicar, and appealed to him to enlighten me on this point, as on the day of judgment. Then he answered me: 'Have no doubt, for surely since St. Peter's time no one sat in St. Peter's chair with greater right than he. Therefore you are wrong to hesitate so much.'"

We regret that Prof. Pastor has so far been unable to publish the Bishop of Viterbo's report in full; but even the fragment above given, if we bear in mind the character and opportunities of the speaker and the solemnity of the assurance given, must carry great weight.

We have laid these important and apparently heretofore unpublished statements before our readers. They can draw their own inferences.

CHARLES G. HERBERMANN.

[It cannot be denied that this new document unearthed by the diligence of Dr. Pastor deals a heavy blow to the pretensions of Clement VII., and coming, as it does, so closely upon the blow dealt by the publication of the similar letter of the Cardinal of Florence, written to his former teacher on the same day (April 14, 1378), with this epistle of the Cardinal of Geneva, it may almost be pronounced a coup de grace. Florence had, indeed, parried the attack of the Urbanists when they confronted him with his letter, by affirming that it was entirely the work of his secretary, whom he had commissioned to convey the news of Urban's election to his old friend, and whose communication he had signed without taking the trouble to notice how it had been worded. Such an evasion could have no place as regards a letter written to the Emperor, and dealing with such important subjects as a papal election and the succession to the empire. Grateful, therefore, to Prof. Herbermann for the flattering terms in which he has alluded to our article, we are even more grateful to him for having brought to our notice this new and important link in that chain of evidence which is ever more firmly establishing the legitimacy of Urban's election. It may not be improper to remark that this juridical question did not come within the scope of our article, which was purely historical and intended to be the first of a series narrating the Great Schism. Dealing with a period of confusion, we strove to place our readers in the same perplexed frame of mind, as to the right and wrong of either side, in which the most learned and holy men of that age found themselves. To have approached the subject with preconceived opinions, would have destroyed the historical interest. We have not since been able to command sufficient leisure to continue our task, though we had collected a great deal of literature bearing on the subject.]

J. F. LOUGHLIN.

Scientific Chronicle.

SYSTEMS OF NUMERATION.

THE PLEA.

Numeration as it Should Be.

THE duodecimal system of numeration should be adopted to the exclusion of the decimal and every other. This is our thesis; and we will now indicate briefly some of the more important proofs that may be used to sustain it. Of course, we claim no originality, and seek no patent either for the idea or the proofs; but we would wish to see this matter taken up for concerted action by enough gallant soldiers, enlisted under the banner of the Duodecimal, to carry him on to victory, and crown him king in the great land of Arithmos.

An article which appeared in the *Educational Review* for November, 1891, from the pen of Professor William B. Smith, of the University of Missouri, treats this matter pretty fully. We have taken the liberty of borrowing from it a good deal of what follows, and also of modifying some minor details of the proposed scheme; but we feel confident that the Professor will not take this amiss, as we will not take it amiss should some one see fit to modify for the better what we have written. Be this as it may, the grand central idea, the complete triumph of the duodecimal system must come; it is on the way:

"Then let us pray that come it may,
As come it will for a' that,
That youth at school no more shall grieve
O'er 'rithmetic and a' that."

The battle is on now between the only great rivals, the decimal and the duodecimal, the former of which has the great advantage of being in possession; the latter has only its own intrinsic excellence on which to rely.

The requisites for a good system of numeration are principally the following:

r. It must be thoroughly systematic, down to the very marrow of its bones. This implies that it must admit of no irregularities, no exceptional cases, no chance of doubt as to meaning in any case, no confusion; and that it should be so clear that, once started on the track, you can go on to any number without fear of failing or faltering. This first requisite can be fulfilled only by making the value of a symbol depend on its position, according to a geometrical series. On this score any of the systems, from the binal upwards, could claim admittance; but the Hebrew, Greek, and Roman notations will have to be irrevocably excluded, and we will have none of them.

2. Whatever the system adopted, the expression for large numbers should be reasonably concise. This condition throws out immediately all the systems described above from the unal to the octaval at least, as may be easily seen by reference to the table already given. The realization of this condition depends upon the value of the base chosen; the larger the base, the fewer will be the digits required to represent a given number, and the higher the number to be represented, the more this virtue of the base will assert itself. Thus to represent ten in the decimal system requires two digits (i.e., 10), to represent a million, seven digits are necessary (i.e., 1,000,000); but, if our base were one-hundred (centesimal system), ten would be represented by one digit and a million would be represented by four (i.e., 1000). But we must not exaggerate here, as the larger the base the greater the number of separate symbols to be invented, and kept perfectly distinct from each other under every condition of careless writing, and bad penmanship, and poor mnemonics. This consideration prohibits us from adopting as a base, though otherwise excellent, such a number as sixty or even twenty-four, while any base between twelve and twenty-four must be rejected for reasons given below.

In regard to conciseness the decimal system is fairly good, but the duodecimal is measurably better. Thus, all numbers below 144 (decimal system) are expressed in the duodecimal by two figures at most; all below 1728, by three figures; all below 20,736, by four; all below 248,832, by five; and so on.

3. In the third place, the perfection of a system of numeration depends on the facility which it offers for the handling of its fractions. Two points of view are possible here. We may consider the merits of a system merely as a system of numbers, as such, or as a system to be applied to the various needs of business, trades, arts, and manufactures. From either point of view the duodecimal system is far in advance of the decimal. Vulgar fractions may, it is true, be expressed with perfect accuracy in any of the regular systems. Thus 1111111111, 1100, 110, 30, 12, 20, $\frac{1}{15}$, $\frac{1}{14}$, $\frac{1}{18}$, $\frac{1}{12}$, $\frac{1}{11}$, $\frac{1}{10}$, are a dozen equally accurate ways of expressing, each in its own system, the value one-twelfth. But vulgar fractions are time-consuming, brain-benumbing devices. In order to add together several fractions, you will usually have to divide, multiply, again divide and multiply, then add, and divide again. To subtract, the same number of operations are required. To multiply or divide fractions is slightly simpler, only two multiplications and one division being necessary in each case. To raise to powers and extract roots requires at least twice as much labor as in whole numbers, and when we have fractions and whole numbers together, it is worse yet. The well-known lines of an unknown genius (only one word having been altered) are not inappropriate:

"Multiplication is vexation,
Division is as bad;
The Rule of Three, it puzzles me,
And fractions set me mad."

Now, when fractions are written as sub-powers of the base of your system, and when they come out even, all this waste and confusion is avoided; as when we write 0.5 for $\frac{1}{2}$ or 0.1875 for $\frac{3}{16}$. Then addition is addition and nothing more, subtraction is only subtraction, and so of other operations.

But as there is never any great loss without some slight gain, so we suppose there can be no great gain without some slight loss, and in this connection we come across the snag of what are called interminate, or circulating, or recurring fractions, i.e., fractions which cannot be expressed accurately with any finite number of digits. An example of this is the fraction one third, which, decimally, becomes 0.3333 . . . etc. to no end. Now, operations performed on these recurring fractions as such, can never give us exact results, but only approximations, and this is a serious defect. And although we can calculate their exact value, still these endless tail-ends are great nuisances. No system can be entirely free from them, but the fewer there are of them in any given system, the more perfect is that system. Now of the first eleven natural divisions of unity (viz. $\frac{1}{2}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{8}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{10}$, $\frac{1}{11}$, $\frac{1}{12}$), eight become recurring fractions in the binal, in the quaternal, in the sextal and in the octaval systems; nine in the ternal and nonal systems; ten in the quinqual, septimal and undecimal systems. To propose any one of them as a practical system of numeration, would therefore be simply an insult

But two remain, and to show their respective merits, we will give a tabular statement.

The first column of the following table is a list of ordinary vulgar fractions; in the second column we have the corresponding *decimal* fractions; in the third the corresponding *duodecimal* fractions.

Decimals.		Duodecimals,
1	= 0.5	= 0.6
3.	= 0.333'3'	= 0.4
1	= 0.25	= 0.3
1	= 0.2	= 0.'2497'
ŧ	= 0.16'6'	= 0.2
17	= 0.'142857'	= 0.'186t35'
18	= 0.125	= 0.16
19	= 0.111'1'	= 0.14
10	= 0.1	= 0.1'2497'
11	= 0.09'09'	= 0,111'1'
1.5	= 0.083'3'	= 0.1

In this table, when a fraction is followed by dots, the meaning is that

the figure or group of figures included between inverted commas ('') is to be repeated to infinity to get the accurate value. Of these there are six in the decimals, and only four in the duodecimals, giving a gain of 50 per cent. for these first eleven fractions, and a still greater gain if we were to continue the list further, in favor of the duodecimal. Nor is this all, for, among the five decimal fractions which come out without a remainder, only three in the decimals (0.5, 0.2, 0.1) are written with one digit each, while in the duodecimals, five (0.6, 0.4, 0.3, 0.2, 0.1) enjoy that advantage. Again, in the decimals, one of them requires three digits (0.125), while among the duodecimals none has more than two; all of which, summed up, gives in the duodecimal system, another saving of time and labor of about 20 per cent. This advantage is also kept up when we go on to still lower fractions.

Furthermore, the fractions we need oftenest, and use most $(\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{6}, \frac{1}{6}, \frac{1}{12})$, are the very ones which are not *repeaters* in the *duodecimal* system; while of the *seven* named above, the *decimal* system shuts off four (viz., $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{6}$, $\frac{1}{12}$), and gives us instead, the $\frac{1}{6}$ and the $\frac{1}{10}$, neither of which is of any practical use.

These advantages all hold good for all multiples of these fractions, as, for $\frac{3}{4}$, $\frac{3}{6}$, $\frac{5}{8}$, $\frac{7}{8}$, $\frac{3}{8}$, $\frac{11}{2}$ and others, all of which, in the *duodecimal* system steer clear of the rock of infinite tails.

Another advantage of the *duodecimal* system is in the higher degree of accuracy obtained by the use of an equal number of digits, in the case of approximations.

These, and other advantages which want of space forbids us to dwell on, prove that the *duodecimal* is theoretically, at least, superior to the *decimal* system.

Let us now take a look at the more practical side of the question, which is of course founded on the theoretical.

It is clear that for an everyday, working system no prime number, as 2, 3, 5, 7, 11, would be at all suitable as a base, and that precisely on account of its indivisibility, while 4, 6. 8, and 9 must be rejected for reasons already given; it is also clear that a base greater than 12 would be inconvenient on account of the number of symbols required. The claims, therefore, of the decimal and duodecimal systems are the only ones that need be considered.

The practical value of the duodecimal system depends mainly on two things, the first of which is its slightly greater conciseness, the second the superior divisibility of its base. We have already sufficiently called attention to the question of conciseness, and will add here merely that we do not consider it, if taken alone, of very great importance. Indeed, if that had been the only grounds of a plea for the duodecimal, the present article, would never have been written. The second, however, is of altogether greater weight.

The number ten can be factored into 2×5 , and no further. Consequently the only decimal fractions that will not be repeaters are those which come from the vulgar fractions $\frac{1}{2}$ and $\frac{1}{5}$, and from the powers and products of these, as $\frac{1}{2} = 0.5$, $\frac{1}{5} = 0.2$; $\frac{1}{4} = 0.25$, $\frac{1}{8} = 0.125$; $\frac{1}{16} = 0.0625$; $\frac{1}{25} = 0.04$; $\frac{1}{125} = 0.008$; $\frac{1}{2} \times \frac{1}{6} = \frac{1}{10} = 0.1$; $\frac{1}{8} \times \frac{1}{125} = 0.001$, etc. . . .

On the other hand twelve can be factored into three different groups: 2×6 , or $2 \times 2 \times 3$, or 3×4 , so that we have 2, 3, 4, and 6 as separate factors. Hence the fractions $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{6}$, will give even duodecimal fractions; they are 0.6, 0.4, 0.3 and 0.2 respectively. All their powers will be just as obliging, as $\frac{1}{8} = 0.16$, $\frac{1}{8} = 0.14$ ($\frac{1}{18}$) = 0.09 ($\frac{1}{217}$) = 0.054 ($\frac{1}{817}$) = 0.0194 ($\frac{1}{814}$) = 0.023 ($\frac{1}{2156}$) = 0.0069, etc.; and all the products of any of these will go and do likewise, as $\frac{1}{2} \times \frac{1}{9} = (\frac{1}{18}) = 0.08$, $\frac{1}{3} \times \frac{1}{4} = (\frac{1}{12}) = 0.1$, $\frac{1}{8} \times \frac{1}{9} = (\frac{1}{12}) = 0.02$ ($\frac{1}{18} \times \frac{1}{27} = \frac{1}{4182}$) = 0.004. The fractions just mentioned, $\frac{1}{16}$, $\frac{1}{27}$, etc., which are enclosed in parentheses are in decimal notation.

This divisibility of the base in the duodecimal system is therefore more than twice as prolific in useful results as that of the decimal system, and gives it a vast advantage over the latter; an advantage which renders it admirably fitted not only to be the system of numeration for arithmetical work in general (because, as we have seen, it is relatively free from repeating fractions), but also fits it to be the foundation of a complete structure of multiples and subdivisions in the everyday matter of weights and measures of all kinds. Well, then, let us reform.

The first step towards a reform in any matter, consists in acknowledging our sinfulness. In the matter of weights and measures our ancestors were terribly sinful, not morally perhaps, but intellectually, arithmetically, scientifically, and they have transmitted their sins, not to the third and fourth generations but to the thirty-third and thirty-fourth. To show this we will take up that one book which of all others we loved most dearly in the days that are long gone by, our Arithmetic. We turn the fond pages till we come to certain Tables of Weights:

```
1. TROY WEIGHT.
```

```
24 grains (gr.) = I pennyweight (dwt.).
20 pennyweights = I ounce (oz.).
12 ounces = I pound (lb.).

2. APOTHECARIES' WEIGHT.
20 grains = I scruple (3).
3 scruples = I drachm (3).
8 drachms = I ounce (3).
12 ounces = I pound (lb.).
```

```
3. AVOIRDUPOIS WEIGHT.

16 drachms ' = 1 ounce (oz.).

16 ounces = 1 pound (lb.).

28 or 25 pounds = 1 quarter (qr.).

4 quarters = 1 hundredweight (cwt.).

20 hundredweights = 1 ton (T.).
```

The arithmetic then goes on to give some explanations. "Troy Weight," it says, "is used in weighing gold, silver, jewels, liquors, etc., and for ingredients used in philosophical experiments." How "jewels" and "liquors" got together, what the "etc." may mean (mayhap redherrings' eyes), what that word "ingredients" may signify, are questions outside the range of our finite knowledge. "Apothecaries' weight is used by apothecaries and chemists in mixing medicines, but drugs are bought and sold by avoirdupois weight." So! But the book forgets to tell us how apothecaries and chemists are bought, sold, and mixed. "By avoirdupois weight, coarse and bulky goods are weighed, and all the common necessaries of life," such things presumably as cabbage, chewing-gum, base-balls, cigarettes, tooth-picks, and the like (liquors and jewels of course excepted).

Here, then, are the three systems of weights in actual use among beings supposed to be endowed with reason. The first and second agree in two points only, viz., in the number of ounces (12) in the pound, and in the number of grains (480) in the ounce, but they reach the latter result by different roads. From these data luckily the number of grains in the pound turns out, in both cases, to be the same, i.e., 5760.

The third, the avoirdupois, agrees with nothing except itself, and even with that but poorly. Some one, peace to his mud, has said that boys are liars by constitution. We don't believe it, for we remember having been boys ourselves; but when the boy is told by his infallible schoolmarm, backed up by the infallible arithmetic, that 28 pounds make one-quarter of a hundredweight, is he to be blamed if his eye for truth takes on a permanent cast? The lie will be four times as big when you tell him that one-hundred-and-twelve pounds make one-hundredweight. Is this the way to instil a spirit of truthfulness into the minds of the rising generation? True, our American arithmetics have corrected this, but it is taught yet to millions of youth in other lands.

We are not done with this avoirdupois weight yet, for we would like to know, not from mere curiosity, but for real practical purposes, how many grains it has to the pound. The "table" is silent, but a supplementary note will tell us that the number is 7000, so with slate and pencil, we figure out that the avoirdupois pound is equal to $1\frac{31}{144}$ lbs. troy, while the troy ounce, to turn the tables again, is equal to $1\frac{31}{144}$ loounce avoirdupois. After that, show us in all this broad land, the boy or girl, or even the woman or man who can tell us, off-hand, how many grains there are in an ounce, and how many there are in a drachm, avoirdupois. We know, because we have just made the calculation; but before you look at the answers, just shut your eyes, and hold your breath, and see if you are ready to answer; but don't all speak at once,

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please. Even if you should happen to know the former, you will almost surely miss the latter. The answers are: Four-hundred and thirty-seven and a half $(437\frac{1}{2})$ grains in the ounce and twenty-seven and eleventhirty-seconds $(27\frac{1}{32})$ grains in the drachm. What a mess!

We turn now to our measures of length. This ought to be a straightforward business, and we look up, if perchance a ray of light may dawn upon us here. A glance at the "table" soon dispels the illusion, for,

```
3 barleycorns
                        = 1 \text{ inch.}
or 11 lines
or 12 lines
  12 inches
                          = I foot.
                          = 1 yard.
   3 feet
 51/2 yards
                           = 1 rod, perch, or pole.
  40 rods
                           = r furlong.
   8 furlongs
                           = 1 mile.
   3 miles
                           = 1 league.
  60 geographical miles = 1 degree on the equator, or on a meridian.
691/6 statute miles (about) = 1 degree.
```

Ah, that poor little inch that don't know whether it is made of barleycorns or lines, or, if so, of how many. Then the idea of making a mixed number $(5\frac{1}{2})$ of one denomination equal to the unit of the next is unworthy of the intelligence of a Hottentot or Bushman.

Belonging under the head of Linear Measure, we have another table made expressly, it seems, for tailors and milliners, which starts out unblushingly with a mixed number, thus:

```
2½ inches = 1 nail (kind not stated).
4 nails = 1 quarter.
4 quarters = 1 yard.

This is nice, but read on:
3 quarters = 1 ell Flemish.
5 quarters = 1 ell English.
6 quarters = 1 ell French.
```

And so the poor tailor or milliner must find out whether his customer is a Fleming, or an Englishman, or a Frenchman before he can know how much material he must give him for an ell. How about it if the customer had already been naturalized? What absurd methods and measures!

When we come to Square Measure, we expect to find the absurdities increase in proportion to the square, and we will not be disappointed, for we get:

```
30\frac{1}{4} square yards = 1 square rod.
Or 272\frac{1}{4} square feet = 1 square rod.
```

To begin with square inches, square feet, square yards, and square rods is natural under the circumstances and innocent enough, but as soon as that is over we lose our way and strike off into what has no existence in Linear Measure at all, viz., roods and acres, for:

```
40 square rods = 1 rood.
4 roods = 1 acre.
So that 160 square rods = 1 acre.
```

Therefore the side of a square whose area is one acre must be $\sqrt{160}$ rods, which gives us 12.6491 rods. The dots indicate that we have not *finished* the operation; neither do we intend to do so, for it would take too long. What we have struck here is not merely a case of a repeating decimal, as 0.333 which, though endless as a decimal, can nevertheless be expressed with perfect exactness by the vulgar fraction $\frac{1}{3}$, or by the duodecimal 0.4. No, the disease here is deeperseated yet, for the exact square root of 160 cannot be extracted at all. Of the several ways of showing this, one will be sufficient.

Reducing to prime factors we have (2×2) (2×2) $(2 \times 5) = 160$. Now, unless all the prime factors of a number can be grouped by twos, so that each group shall be a perfect square, then the number itself will not be a perfect square. But, of the three groups above, the first and second are perfect squares; the third $(2 \times 5 = 10)$ is not. For the final digit of a perfect square must be 1, or 4, or 5, or 6, or 9, or one of these followed by an even number of zeros. Now 10 does not fulfil either of these conditions; therefore, it is not a perfect square, and therefore 160 is not a perfect square. Hence, no created intelligence will ever be able to give us in rods, feet, or inches the exact length of the side of a square acre. And yet that acre is the *unit* of land measure for those who measure by rods, feet, and inches, and who expect one day to possess all the land.

In Cubic Measure we look for things solid. Well, the cubic inch, foot, and yard are derived honestly from the linear inch, foot, and yard, and are neither better nor worse than their origin; but when we have reached that point the table immediately branches off wildly into:

```
40 cubic feet of round timber 
Or 50 " " hewn " } = 1 ton or load.
128 cubic feet = 1 cord of wood.
```

How would it be if the timber were hewn *round*, as in masts and spars? But enough. The Anglo-Saxon tongue, rich as it is in strong terms, fails to supply words to characterize such a . . . (no use, it won't come).

In Liquid Measure things ought to run smoothly, and, at first sight, they do seem a little better than elsewhere. Thus:

```
4 fluid ounces = 1 gill.
4 gills = 1 pint.
2 pints = 1 quart.
4 quarts = 1 gallon.
31½ gallons = 1 barrel.
63 gallons (2 barrels) = 1 hogshead.
2 hogsheads = 1 pipe.
2 pipes = 1 tun.
```

The gill, pint, quart, and gallon we can manage to swallow, but the

barrel, hogshead, pipe, and tun are myths and frauds and arithmetical falsehoods.

Moreover, as Liquid Measure is a measure of volume, we naturally want to know what relation there is between it and Cubic Measure, which is also a measure of volume. Now:

```
I gallon = 231 cubic inches = 8.33888 . . . . lbs. distilled water.

Or I gallon = 277½ " = 10. " " "

Or I gallon = 282 " " = 10.171325 . . . " " "

Or I gallon = various other measures. . . .
```

As if this were not bad enough, we have a Dry Measure in which 32 quarts = 1 bushel, and as 4 quarts = 1 gallon, we infer that 8 gallons would be equal in volume to 1 bushel. Therefore the bushel should be:

$$8 \times 231 = 1848$$
 cubic inches.
Or $8 \times 277\frac{1}{4} = 2220$ " "
Or $8 \times 282 = 2256$ " "

Yet it is not, for the bushel is defined, by law, as 2150.4 cubic inches; and then, by working back again, we would find our quarts and pints shaky, and we get bewildered entirely. There is then no simple relation between our Weights and Measures, although a futile attempt was made to establish something of the kind by the introduction of that insane fluid ounce.

We have not by any means exhausted the potential confusion of this matter; there are yet other tables in the arithmetic, and pages of others in the "Dispensatory," just crammed with similar incongruities, traps, and pitfalls; so much so that there is probably no sane man living who could give from memory all the curls and twists of our systems of Weights and Measures.

Knowing how they originated, it is not hard to account for their vagaries. They were not invented systematically, or built up on any prearranged plan, but just grew up, bit by bit, according to needs and whims of different tribes. Later on, every once in awhile, some king would try to disentangle the snarl by enacting laws to regulate the existing standards of Weights and Measures. Their intentions were honest enough, and they accomplished some little good, but it was only palliative, not curative. They did not go to the bottom of the evil, and half-way remedies are usually worthless. The evil here is in the jumble of inconsistencies in the denominations of the systems, taken either separately or in relation to one another, and in the absurdity of having more than one system anyhow. These are the arithmetical sins against good sense which have been handed down to us. Are we going to hand them down to posterity, or are we going to wipe them off the escutcheon of our race, and hand it along, clean and untarnished, to our successors?

A desperate attempt to remedy this state of confusion, in the matter of weights and measures, has indeed been already made by the French, in their metric system, and it becomes necessary for the better understanding of what follows, to say a word about it here. For standard of length they took what they supposed to be the ten-millionth part of a quadrant of a meridian, and called it the "metre." We have Ameri-

canized the word to "meter." Its value is 39.37043 . . . inches, about. Then, each denomination ascending is ten times as great as the preceding one, and a Greek prefix is used to indicate this. Each denomination descending is one-tenth as large as the preceding, and a Latin prefix does duty here. Thus:

```
ASCENDING.

10 meters = 1 decameter.

10 decameters = 1 hectometer.

10 hectometers = 1 kilometer.

10 kilometers = 1 myriameter.

DESCENDING.

0.1 meter = 1 decimeter.

0.1 decimeter = 1 centimeter.

0.1 centimeter = 1 millimeter.
```

And then their vocabulary seems to have given out.

Square Measure and Cubic Measure are derived directly from the Linear Measure, by the simple process of squaring and cubing, and no fag-end irregularities are tolerated.

For unit of weight they took a cubic centimeter of water, and called it a "gramme." We have shortened it to "gram." The prefixes for higher and lower denominations are the same as above, thus:

```
10 grams = 1 decagram.
10 decagrams = 1 hectogram, etc., etc.
And, o.1 gram = 1 decigram.
0.1 decigram = 1 centigram, etc., etc.
```

For Liquid and Dry Measures, the French use their Cubic Measure, but since for ordinary work, the cubic centimeter is too small, and the cubic meter too large, they adopted as a convenient unit the cubic decimeter, which is a little more than our quart. This they called the "litre" (written "liter" by us, and pronounced lee-ter). From this they have decaliter, hectoliter, kiloliter, deciliter, centiliter, and any others that may be desired.

This system is in itself excellent because it establishes a clear, simple, obvious relation between weights and measures, so that we can pass from one to the other without labor, and at the same time be sure of perfectly exact results. This is the reason why it has been adopted by several countries, and by men engaged in scientific pursuits, the world over. Yet, although it has been legalized in the United States and in Great Britain and her colonies generally, more than twenty-five years, English-speaking people will not adopt it. The fact is that it has one serious, fatal drawback, that of having been founded on the decimal system of numeration. Had the duodecimal system been brought into use, and a metric system been founded on it, the result would have been as near perfection as the nature of numbers will admit of, and such a system, once started, would have gone on, conquering and to conquer, till not a rag of a decimal would be left floating over any spot on the face of the earth. It is time now. Come on comrades, fall in, and keep step in the ranks of a new and true intellectual progress.

Before entering into further details, it becomes necessary to make a digression in order to settle upon a nomenclature for our duodecimal system.

Clearly, it will not do to use the same word-combinations as in the effete decimal system, because the *meanings* would not correspond to the words. Thus, when we write 25 and pronounce it "twenty-five," we mean two tens + five, but in the duodecimal system 25 would mean two twelves + five, and we must have a method of naming which will indicate this fact. Now, we look upon it as a first principle that the names of a simple number (i.e., the name of a single digit) should be a simple (not compound) word, and that the name of a combinational number (formed of two or more digits), should be derived from the names of the components. Most, if not all, systems of nomenclature have violated this principle, more or less.

In English the compound sign 11, which means ten-one (one-ten) is called eleven in which word there is no very obvious trace of either the word ten or the word one. The same is true with regard to twelve. We do not mean to say that these words did not mean originally one-ten, two-ten; we believe they did, but the relationship has been very much obscured. When we get to thirteen, the relation to three-ten is clear, and from that on to the end of numbers everything is lovely. The French, not content with these irregularities have allowed yet others to creep in. Thus they have names which, if translated literally, would read: sixty-nine (69), sixty-ten (70), sixty-eleven (71), etc., . . . up to sixty-nineteen (79), and then, four-twenty (80), four-twenty-one (81), etc., . . . up to four-twenty-nineteen (99), and even, though tarely used, six-twenty for 120.

In the scheme proposed below we intend to sweep away all irregularities of whatever kind, and to make the whole nomenclature perfectly regular and consistent. The *names* proposed may not be final; better ones may perhaps be found, and if any one has better to offer, let him stand forth and do so; but the *things* must stand. The table, we think, almost explains itself, yet, to forestall any possible hard feelings, we put, right here, what few remarks we have to make.

The figures in parentheses are of the decimal system, all the others are of the duodecimal. We use the ten digits (o to 9 included) of the defunct decimal system, with their ancient names, except in the case of "seven" which is contracted to "sen." As remarked before, we use provisionally t for ten and 1 for eleven, which is shortened to "len." The next number being a combinational one, we use two symbols (10), and for a name we contract our present "twelve" to "tel." Then, to be systematically exact, we hitch on the zero, and hence 10 = tel-zero (formerly twelve), but in practice the word zero will be omitted, and this has been indicated by enclosing it in parentheses.

Having adopted "tel," we coin a new adjective, "telimal," and make a vow never to use that worn-out, unnecessary, cumbersome word, duodecimal, again. Also "telth" will take the place of twelfth, "senth" of seventh and "lenth" of eleventh. Another thing to be noticed is that in true combinational names, when the larger number precedes, addition is meant, as 16 = 10 + 6 = tel-six (the obsolete eighteen); and, on the contrary, when the smaller number precedes, multiplication is intended, as sixtel $= \text{six} \times \text{tel} = 6 \times 10 = 60$ (the obsolete seventy-two).

TELIMAL (DUODECIMAL) NOMENCLATURE.

(0)	Zero	(49)	41	fortel-one		(98)	82	eightel-two	
1 (1)	one .	(50)	42	"	two	(99)	83	66	three
	two			66	three		84	66	four
(2) 2		(51)	43	66		(100)	04	66	
(3) 3	three	(52)	44	66	four	(101)	85	"	five
(4) 4	four	(53)	45	66	five	(102)	86	1	six
(5) 5	five	(54)	46		six	(103)	87	66	sen
(6)	six	(55)	47	46	sen	(104)	88	66	eight
(7) 7	sen	(56)	48	46	eight	(105)	89	66	nine
(8) 8	eight	(57)	49	"	nine	(106)	8t	66	ten
(9) 9	nine	(58)	4t	"	ten	(107)	81	"	len
(io) i	ten	(59)	41	"	len	(108)	90	ninet	el-(zero)
(11) 1	len	(60)	50	fiftel-	(zero)	(109)	91	66	-one
(12) 10	tel-(zero)	(61)	51	66	-one	(110)	92	"	two
(13) 11	tel-one	(62)		66	two	(111)		66	three
2 40	tel-two	(63)	52	66	three	(112)	93	66	four
137 121 7	1 2 121 1	23	53	66		15 (1	94	66	five
(15) 13	tel-three	(64)	54	44	four	(113)	95		
(16) 14	tel-four	(65)	55	• • • • • • • • • • • • • • • • • • • •	five	(114)	96	"	six
(17) 15	tel-five	(66)	56	1	six	(115)	97		sen
(18) 16	tel-six	(67)	57	"	sen	(116)	98		eight
(19) 17	tel-sen	(68)	58	6.6	eight	(117)	99	66	nine
(20) 18	tel-eight	(69)	59	"	nine	(118)	9t	"	ten
(21) 19	tel-nine	(70)	5t	66	ten	(119)	9l	46	len
(22) It	tel-ten	(71)	51	66	len	(120)	to	tente	l-(zero)
(23) Il	tel-len	(72)	60	sixtel	-(zero)	(121)	tı	66	-one
(24) 20	twitel-(zero)	(73)	61		-one	(122)	t2	**	two
(25) 21	twitel-one	(74)	62	66	two	(123)	t3	**	three
(26) 22	'' two	(75)	63	66	three	(124)	t4	66	four
1 2 21	" three		64	66	four	15 (1			five
(27) 23	tince	(76)		66	five	(125)	t5	66	six
(28) 24	iout	(77)	65	"		(126)	t6	66	
(29) 25	1146	(78)	66	"	six	(127)	t7		sen
(30) 26	SIA	(79)	67	46	sen	(128)	t8	1	eight
(31) 27	" sen	(80)	68	1	eight	(129)	t9	"	nine
(32) 28	" eight	(18)	69	"	nine	[(130)	tt	66	ten
(33) 29	" nine	(82)	6t	166	ten	(131)	tl	"	len
(34) 2t	" ten	(83)	61	46	len	(132)	lo	lente	l-(zero)
(35) 21	" len	(84)	70	sente	l-(zero)	(133)	11	66	-one
(36) 30	thirtel-(zero)		71	66	-one	(134)		44	two
(37) 31	thirtel-one	(86)	72	"	two	(135)		- 44	three
(38) 32	" two	(87)	73		three	(136)	14	66	four
	" three	(88)	74	66	four	(137)	15	**	five
(39) 33	" four	(89)	-		five	1 2 - 1 1	16	66	six
(40) 34	" five		75 76		six	(138)			sen
(41) 35	live	(90)		66		(139)	17	46	
(42) 36	SIX	(91)	77	66	sen	(140)	18	66	eight
(43), 37	SCII	(92)	78	"	eight	(141)	l9	66	nine
(44) 38	eight.	(93)	79	ı	nine	(142)	lt	ľ	ten
(45) 39	" nine	(94)	7t	"	ten	(143)	11	66	len
(46) 3t	" ten	(95)	7l	66	len				
(47) 3l	" len	(96)	80		el-(zero)				
(48) 40	fortel-(zero)	(97)	81	- "	-one				
	<u> </u>	1							

Of course the t's and the l's look strange. We are waiting for some artist to invent better forms.

To pass to numbers of a higher order than are found in the table we need a few new names. Prof. Smith suggests, and the suggestion seems an excellent one, to use "po" (power or position) with the Greek prefixes, di, tri, etc., for coefficients. Hence "dipo" would mean the second power of tel, i.e., $10 \times 10 = 100$ (144 formerly). Next use Latin prefixes for telimal fractions, and you get as follows:

```
telth = 10^{-1} = 0.1.
tel == 10.
dipo = 10^2 = 100.
                                           semipo = 10^{-3} = 0.01.
tripo = 10^8 = 1,000.
                                           tertipo = 10^{-9} = 0.001.
tetrapo = 10^6 = 10,000.
                                           quartipo = 10^{-4} = 0.00,01.
pentapo = 10^6 = 100,000.
                                           quintipo = 10^{-6} = 0.00,001.
hexapo = 10^6 = 1,000,000.
                                           sexipo = 10^{-6} = 0.00,000,1,
heptapo = 10^7 = 10,000,000.
                                           septipo = 10^{-7} = 0.00,000,01.
octapo = 10^8 = 100,000,000.
                                           octipo = 10^{-8} = 0.00,000,001.
ennapo = 10^9 = 1,000,000,000
                                           nonipo = 10^{-9} = 0.00,000,000,1.
dekapo = Io^t = Io,000,000,000.
                                           decipo = 10^{-t} = 0.00,000,000,01.
endekapo = 101 = 100,000,000,000.
                                           undecipo = 10^{-1} = 0,00,000,000,001.
dodekapo = 10^{10} = 1,000,000,000,000
                                           dodecipo = 10^{-10} = 0.00,000,000,000,1.
```

This will probably be enough, upwards and downwards, for all practical purposes. If, however, any one should have need to count higher or lower, we would advise him to hire a clerk; who can be allowed to waste himself away in writing out Greek and Latin prefixes, to no end.

A word now about the *reading* of numbers in this system. Several ways will suggest themselves; we give one which we think short, clear and simple. For example, 3,8t6,2l1,794,052. Divide it into periods of three figures each, and then read:

Three dodeka, eight-ten-six enna, two-len-one hexa, sen-nine-four tripo, fiftel-two; requiring 22 syllables made up of 64 letters. Now, translating that number into its equivalent in the decimal system, we have 33,343,759,669,310 which is read: Thirty-three trillions, three-hundred and forty-three billions, seven-hundred and fifty-nine millions, six-hundred and sixty-nine thousand, three-hundred and ten; requiring 38 syllables made up of 134 letters. In this example, taken entirely at random, there is a clear gain of more than 42 per cent. in the reading and of more than 52 per cent. in the writing, by the use of the telimal system. In reading, the "po" is omitted whenever its omission will cause no ambiguity. End of the digression.

We return now to our weights and measures in order to show how they may be brought under the rule of the *Telimal*.

The first thing we need is a standard of length, but there is no use whatever in searching the earth and the skies for a so-called *natural* unit. Any handy length will do, and fortunately we have just such a one already, the yard, which is preserved with such infinite care by our own government as well as by that of Great Britain.

Taking that as a unit, and applying the telimal system, we have forthwith:

```
10 yards = 1 tel yard = (12 yards old style).

10 tel yards = 1 dipo yard = (144 yards old style),

10 dipo yards = 1 tripo yard = (1728 yards old style).

10 tripo yards = 1 tetrapo yard, etc., to any extent whatever.
```

The tripo yard would serve admirably as a unit for long distances, being nearly equal to our present mile.

```
1 yard = 10 telth yards = 1 yard.

1 telth yard = 10 semipo yards = 0.1 yard = (3 inches, old style).

1 semipo yard = 10 tertipo yards = 0.01 yard = (1/4 inch, old style).

1 tertipo yard = 10 quartipo yards 0.001 yard = (1/4 inch, old style),

etc., down to molecular and atomic dimensions.
```

The telth yard is just a handy length for ordinary small measures, while the semipo yard (1/4 inch) is employed constantly in every workshop in the land.

For square and cubic measures the same unit (the yard) squared or cubed, with its multiples and subdivisions, will be used.

Of these, the dipo yard square would be something over four of our acres. This should hardly be thought too large a unit for a country like this; or, at any rate, if you prefer, you can buy a quarter dipo yard instead of a whole one.

The telth yard cube would give a convenient unit for liquid and dry measure, being equal to 27 of our cubic inches, or just a little less than our pint. All higher and lower denomination would of course be telimal multiples and subdivisions of these.

For weights, the standard unit would be the weight of the unit of volume (the telth yard cube) of distilled water, at its maximum density; this would very nearly correspond to our present pound. Multiples and subdivisions as usual.

For a "set of weights" to be used with a balance, the 1, 2, 3, 6, would probably be the most convenient; for, taken either separately or by addition, they would serve for weighing anything from one up to the unit of the next higher rank inclusively. Thus,

```
With weight 1 we can weigh one
                                           = 1.
  With weight 2 we can weigh two
                                           == 2.
  With weight 3 we can weigh three
                                           = 3.
  With weights 1 + 3 we can weigh four
                                           == 4.
  With weights 2 + 3 we can weigh five
                                           == 5.
  With weight 6 we can weigh six
                                           =6.
  With weights t + 6 we can weigh sen
                                           =7.
  With weights 2 + 6 we can weigh eight
                                          = 8.
  With weights 3 + 6 we can weigh nine
                                           = 9.
  With weights 1 + 3 + 6 we can weigh ten = t.
  With weights 2 + 3 + 6 we can weigh len = 1.
  With weights 1 + 2 + 3 + 6 we can weigh tel = 10 (the unit of the
rank above).
```

For larger numbers take 10, 20, 30, 60, and the same advantages of the greatest return from the least outlay, remains.

An important factor in the running of the machinery of this world is money. We are all naturally somewhat interested in the question of mono-metallism, bi-metallism, silver bills and the like, but these phases of the money question do not enter here. We are concerned just now with the arithmetic of money. All things considered, we think our telth pound of coin silver (len-telths fine), which is very near our present dollar, would be the best unit. Then divide and multiply that to your heart's content, but always telimally.

The coins or bills to be issued should be according to the scheme given above for weights, viz., the 1's, 2's, 3's, 6's of each rank. This would greatly facilitate the counting and reduce the handling of money; besides, silver coins could then be used for weights on a small scale.

The French, in their metric system, tried to get a grip on circular and time measure, but failed completely. We hope to be more successful.

In circular measure we have now,

```
Sixty seconds = one minute.
Sixty minutes = one degree.
Sixty degrees = one sextant.
Six sextants = one circle.
```

This is probably a remnant of an attempted sexagesimal system. In time measure we have:

```
Sixty seconds = one minute.

Sixty minutes = one hour, and then we go wild again, for,

Twenty-four hours = one day.
```

Now, a day is measured by one turn in a circle of a point on the earth, and an every-day problem is to convert time into longitude; and yet the words which correspond to minute and second, do not mean the same things; for a minute of time equals fifteen minutes of longitude. Comment is unnecessary.

In our new system circular and time measures are the same. After mature consideration we have come to the conclusion that it will perhaps be better to take the semi-circumference as a unit instead of the entire circle. This granted, divide and subdivide that unit according to the telimal system, and you have:

```
Tel fourths (^{iv}) = ^{i''} (= about \frac{1}{6} second, old style).

Tel thirds = ^{i''} (= about 2 seconds, old style).

Tel seconds = ^{i'} (= 25 seconds, old style).

Tel primes = ^{io} { grade (of time) (= 5 minutes, old style).

Tel { grades } = ^{iv} hour (= ^{iv} hour = ^{iv}, old style).
```

```
Tel hours = \begin{cases} 1 \text{ day} = 1 \text{ night (of time) } (= 12 \text{ hours, old style).} \\ 1 \text{ hemicycle (of circle) } (= 180^{\circ}, \text{ old style).} \end{cases}
```

If it were preferred to use the whole circumference as a unit, then each of the above values would be doubled. This would make the *hour* very long.

Holding close relationship with the foregoing is the division of the year. The day (as used now) is a natural division of time which man can neither lengthen nor shorten; the week of sen (old seven) days has been settled by higher legislation than ours, and it behooves us to leave it alone. The year is another natural unit of time, and its division into tel months falls in with our telimal system. The only regulating that should be attempted in this matter is to make the months of equal length by giving to each thirty days. There will then remain five days over in common years and six in leap-years. Let these be made legal holidays, belonging to no month, and bearing no interest, and let them be spaced at even distances throughout the year, as follows. We leave the numbers in decimal notation:

```
1 day New Year's Day.
January,
           30 days.
February, 30 days.
            1 day Leap-Year Day every fourth year.
March.
           30 days.
April,
           30 days.
           1 day Spring (Vernal?) Day.
May,
           30 days.
June,
           30 days.
           I day Independence Day (put the "Glorious old Fourth"
                     here).
July,
           30 days.
August,
           30 days.
            1 day Autumn Day.
September, 30 days.
October.
           30 days.
            1 day Election Day every fourth year, but celebrate it
                     every year.
November, 30 days.
December, 30 days.
```

This suggestion about the year is considered only as an ornament, and whether it be adopted or not, the telimal system will not suffer any loss.

In looking back over our "tables," we are struck with a curious fact, which seems to indicate that there always existed a natural longing for that number twelve.

The *old* multiplication tables always went to twelve times twelve. Then we have:

```
Twelve pence = I shilling.

Twelve lines = I inch.

Twelve inches = I foot.

Twelve ounces = I pound (in two systems).

Twelve units = I dozen.

Twelve dozen = I gross.

Twelve gross = I great gross.

Twelve hours = I day (often used thus).

Twelve signs = I zodiac.

Twelve months = I year.
```

Is it not by the *dozen* that you buy shirts, collars, cuffs, socks, eggs, cups and saucers, knives and forks, spoons, hardware, chemical-ware, handkerchiefs, buttons, candles, and dozens and dozens of the smaller articles of every-day use? No other number occurs anything like so often in the tables, except that most useful factor of twelve, viz., four; but ten and five are conspicuously absent. This shows that common sense, in spite of the heathen decimal, still succeeded, to some extent, in making itself heard. Who ever wanted to buy $\frac{1}{5}$ of a pound of tea, or $\frac{1}{10}$ of a gallon of molasses? The five and the ten, i.e., the decimal sys-

To sum up, the telimal system has, among others, the following advantages over the decimal:

tem, is doomed, and the sooner it is knocked down and carried out the

It is more concise; it has fewer repeating fractions and, therefore, less need of the crazy vulgar fractions; it is very much more exact in the matter of approximations; the divisibility of its base stamps it as the natural system of numeration; arithmetical operations in it are easier, especially multiplication; it has no perplexing tables to be learned and forgotten, or left, as is so often the case, unlearned altogether; it requires no multiplications or divisions to reduce from one denomination to another; it is just as easy, in it, to handle compound numbers of any kind as to work with abstract numbers; much of what to us is now hard and tedious work will be done with ease, even mentally, in the telimal system.

To the astronomer, the surveyor, the physicist, the chemist; the mechanical, the civil, the electrical engineer, the architect; to every one who uses an instrument of precision; to the machinist, the carpenter, to the business man, the teacher, the scholar; to every one who deals largely in figures, it would save more than one year in every tel years if the change were made.

And, after all, the change is not so very great. Two new symbols, three or four new names, a few Greek and Latin prefixes, and all is ready. A grown man would understand it at sight, be able to use it in a week or two, be perfect in it in a couple of months, think in it at the end of a year, and would bless God for the rest of his days for having fallen in with so superior a method of managing numbers. The schoolboy would grow fat on it, and know more arithmetic at tel years of age than his father did at twitel.

The only real difficulty in the way is the unlearning of the decimal system; and "the beast with ten horns" would make a hard fight, but that applies only to the unfortunates of this generation. "Whatever man has done man may do." Six or seven centuries back all western Europe abandoned its old systems of numeration and adopted the decimal. That system has been weighed in the balance and found wanting. Where should be the insurmountable difficulty in throwing it over now and in putting in its place the most perfect system which the nature of numbers will admit of, and which will never need replacing so long as the world endures—nor afterwards?

A century back France woke up and brushed away all her foolish old systems of measures and weights, introduced her metric system, and induced several other countries to do the like. In a short time everybody was talking "kilogrammes," "centimetres," "hectolitres," etc., or words to that effect, and yet no bones were broken over the matter, the literature of the country was not overthrown, nor was the science of mathematics destroyed. Yet the change proposed here is no more violent than was then brought about.

About the same time the United States gave up \mathcal{L} , s., d., and introduced $\mathbf{8}$, dimes, cents, without creating a revolution or stirring up any bad blood. The change proposed now is dipo, tripo, tetrapo times more useful, and the cost bears no proportion to the gain.

"Let us then be up and doing;"
Rouse ye now, ye valiant men,
The light of science still pursuing,
Thunder o'er the ranks of TEN.
Onward to the conflict press ye,
Bearing high the flag of TEL;
And may coming ages bless ye,
Proclaiming that ye have done well.

COMPLETION OF THE NIAGARA TUNNEL.

This subject has been sufficiently treated of in the daily journals, but since the ultimate end of the "daily" is usually the matutinal ignition of carboniferous materials in the grate of the culinary department of our homes, we have thought it well to give the matter a more secure and permanent resting place among the scientific "Notes" of the AMERICAN CATHOLIC QUARTERLY REVIEW.

The utilization of the energy of falling water for industrial purposes is by no means a new idea. It has been known for ages, and has been in constant application in every land where the rivers flow down to the sea. Even the advent of steam machinery, with all its advantages, could not succeed in completely ousting the ancient water-wheels from their position; and much less has it been able to impede the progress of the modern improved turbine.

In the undershot wheel, the momentum of running water is utilized on the flat paddles of the wheel; but this is effected under very unfavorable conditions. In the breast-wheel the water acts merely by its dead-weight, in the buckets, on about one-quarter of the circumference, both the quantity of water and its leverage decreasing rapidly from the moment the water enters till it leaves the buckets. In the overshot wheel the water acts in like manner, by its weight, but this time on nearly one-half of the circumference, the leverage varying from zero to a maximum and back to zero again during each semi-revolution. In the turbine, advantage is taken of the vertical fall of the water in an enclosing tube, and of the reaction due to its exit in a nearly tangential direction. Here, weight, velocity of fall, and a constant maximum of leverage, conspire to produce rotation, and the result is a wonderfully efficient mechanism. Besides, the turbine requires but a small fraction of the space demanded by the older forms of water-wheels.

Water, when its energy has been used up, must, like everything else in this world, be got rid of; after doing its work it must pass away, and that part of the plant in which this takes place is called the tail-race. Men, with an eye to practical work, could not long look upon Niagara without asking themselves whether there might not be some way of putting to use a part, at least, of its tremendous energy. Naturally, the old-fashioned water-wheel was first thought of, and it has, indeed, been for a long time in use. The wild idea of hanging a wheel in the falling water itself was speedily abandoned; but the river was tapped about threequarters of a mile above the fall, and the water led through a canal to a spot further down, where it tumbled over and made a little fall on its own account. This arrangement still exists. It is the running water of this canal which gives the power, and the amount obtainable depends on the difference of level between the inlet and the outlet. This, however, bears but a small proportion to the energy wasted after the water leaves the canal. Nevertheless, it has sufficed for the driving of as many mills as could be located on that three-quarter mile stretch.

But all this will soon be changed; the great tunnel is completed. This is not a railroad tunnel, though it would be large enough to accommodate a double track. It is merely the tail-race for the turbine wheels. It begins at water-level, below Suspension bridge, and continues nearly parallel with the river, at an average depth of 160 feet through the solid rock, right under the city of Niagara Falls. At its upper end an open shaft rises to the surface. Between this point and the river an inletcanal has been built. It is 1500 feet long and 12 feet deep; at the river end it is 230 feet wide, but tapers to 150 feet at the shaft end. In the shaft are the wheel-pits, one of which, already completed, is 140 feet long by 18 feet wide, and 180 feet deep. In the bottom of the wheelpits turbines will be placed whose axles will reach above the surface. The head of water on the turbines will be about 140 feet. Wheel-houses of brick, iron, and steel, will cover the pits, and will contain the machinery for the transmission of the power, in the shape of compressed air, and cables, and dynamos. The armatures of the dynamos will be connected directly to the axles of the turbines. Both turbines and dynamos will be the largest yet constructed in this country.

The tunnel is 21 feet high by 19 feet wide, in the shape of a horseshoe. For fear of the wearing action of the water on the limestone of the tunnel, the latter has been lined with brick, except the last 100 feet near the outlet, where the lining is of heavy plates of steel.

Some anxiety has been expressed lest this drawing off of the water might injure the æsthetic value of the Falls. There seems to be no danger of this, for the turbines, when used to the full capacity of which the tunnel is capable, will not use more than 4 per cent. of the river water. That loss will not be noticeable. The total horse-power of Niagara Falls is estimated at 3,000.000. It has been said that, if the whole output of coal in the world were used in working steam-pumps, all together, they would scarcely be able to pump Niagara back as fast as it falls.

Of the 120,000 horse-power to be obtained from the turbines, 45,000 are booked for Buffalo, 18 miles away; 30,000 to other points in the vicinity, and the remainder is for rent to whosoever wants it. The price asked is remarkably low, being only \$8.00 for x horse-power continuously, day and night, for a year.

A similar project is on foot on the Canadian side of the river, and is in the hands of the same company, and there can be no doubt now that both enterprises will be crowned with complete success.

THE LIGHTNING-BOLT.

WE used, long ago, to call it thunder-bolt, and we really reverenced it as much under the old name as under the new. It matters little, however, which way you call it; it smells as sweet by one name as the other.

Nowbody doubts, nowadays, about the identity of lightning with electricity. We measure what electricity will do by the product of its units of pressure into its units of flow. This is analogous to what is done in computing the work done by steam. If steam is delivered under a known pressure, and at a known rate, we can tell what that steam will be able to do in a given time. So, if we know the electric pressure (called volts), and the rate of flow (called ampères), we can tell the horse-power developed.

Now, it has been calculated, from pretty fair data, that in a good lightning-bolt the pressure is upwards of 3,500,000 volts, and the rate of flow 14,000,000 ampères, and that the time occupied in getting in its work is the $\frac{1}{20000}$ of a second. The product of these three factors gives us 2,450,000 units of electrical energy. It takes 746 of these units to make one horse-power. The horse-power of our lightning-bolt is, therefore, 3,284,182. If it were kept up at this rate, and we could only catch it and store it up, and tame it down to be used when required, the question of fuel for heat, light, and motive power, need give the world no further trouble; and besides, the damages now caused by lightning would be averted. Here is a grand field, in fact, all out-doors, earth and skies included, open to some ingenious inventor.

ICE AND PROCESSES FOR ARTIFICIALLY MAKING IT.

Ī.

SUMMER and winter, with their alternations of heat and cold, have followed each other pretty regularly, over a good part of the earth, as long back as we can remember; possibly a good deal longer. As far as the winter was concerned our ancestors found themselves compelled, through sheer necessity, to take means to keep themselves from being frozen, but they do not seem to have given themselves much trouble about keeping themselves from melting in summer. The advance of civilization, with the enervating results of its comforts and luxuries, is, according to the physicians, making the people of each generation less able to bear with the vicissitudes of climate than were their predecessors. We must be kept warmer in winter and cooler in summer or else we begin to complain that life is not worth living. We do not remember to have read or heard about the storing of winter-ice for summer use by the North American Indians, nor even by the first white settlers, yet, nowadays, no well-regulated household can get along in the warm weather without its supply of ice. The vital question is, where it is to come from.

Naturally the first means to suggest itself would be to store up the surplus of the winter supply. This is indeed what we have been doing for a long time past, and the ice-crop is one of the most important harvests of the year. This method has, however, serious inconveniences. ably more than one-half of the ice-crop of each season is melted before it reaches the spot where it is calculated to do most good. have to take the ice as nature gives it, mud, miasms, animalculæ and all. We have seen ice taken, for domestic use, from water too filthy for bathing purposes, much less for drinking. It is now an exploded idea that dirty water can make clean ice. True, a part of the impurities, solid and gaseous, may be expelled by the act of freezing, but seldom or never the whole of them. We have seen bucketfuls of mud and muck taken from the bottom of an ice house when it was opened for a fresh supply of pure ice, and proportionally large quantities from a simple water cooler. If used only for refrigerating purposes, not for drinking, it matters less, but we Americans will not be content without our ice-cold drink in summer, no matter how much we offend against the laws of health. Well, if we must use ice in this way, let us at least have it clean and pure.

It was not, however, on this account, but because of the threatened failure of our ice-crop that a wag proposed to go up to Baffin's Bay and tow a few icebergs down and retail them in lots to suit customers along the coast. It was laughed at as a bit of fun, but the projector took it seriously, and proposed to prove by figures that it would pay. Several arguments, each sufficient of itself to disprove the whole scheme, might be brought forward, but a single one will suffice. A respectable iceberg will stand 100 feet out of water, and that means that its total height will

not be far short of rooo feet. A lump of ice, just as any other solid body, must necessarily float with its longest axes horizontal; let its length and breadth then be, say, a half mile. Now, that lump would weigh over 200,000,000 tons. That might do if it could be all housed, but how much of it would be melted in the ocean, and how much in handling and transportation before being housed? How much of it would ever reach New Orleans, where it would be needed, at least as much as anywhere else? And besides, that block of ice would draw from 800 to 900 feet of water. Where then could it make harbor? Anyhow, since we are at it, let us hitch the United States Navy, or at least what there is of it afloat, to our iceberg, and see whether, in the currents of the ocean, the dog would waggle the tail, or the tail waggle the dog. We will not embark in the iceberg business just yet. But ice we must have, and pure ice if we can. How this may be had will be explained under a subsequent heading.

II. ICE-MACHINES.

Various methods have been employed for the artificial manufacture of ice, but they may all be reduced to three classes, the first purely mechanical, the second principally chemical, the third a combination of physical and mechanical.

- 1. Mechanical. When air is condensed by mechanical force it becomes heated, and that, too, just in proportion to the force employed. When condensed air is allowed to expand it does work, consequently heat is used up and the temperature of the air is lowered. This is more especially the case if this same air in expanding is made to do external work, as for example, in running an air-motor. If we used this air immediately after condensing it, that is, while still hot, the lowering of the temperature would just compensate the rise due to compression, and nothing would be gained. Instead of this the air after compression is cooled by being passed through pipes surrounded with cool running water. Then, after having been deprived of its heat of compression, if allowed to expand, as stated above, its temperature will descend in proportion to the amount of expansion. By this means temperatures as low as 80° below zero have been obtained. Now this air may be caused to circulate around a tank of water, the contents of which may thus be frozen. This method is, however, rather expensive for the actual production of ice. It serves a better purpose when used to cool spaces where a low, but not actually freezing, temperature is required, as in the preserving of meat on long sea voyages, and in vaults of breweries, etc.
- 2. Chemical. We have called the second method chemical, though chemists and physicists both claim it. They are probably both right, or at least partly so. It consists in freezing one body by the melting of another. Our ice-cream machine is an example in point. To be definite, we will take two pounds of chopped ice, the temperature of which will be 32° F., and with it mix intimately one pound of salt at the ordinary temperature, say 50° F. They will melt together, and the result-

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ing mass will be at a temperature very near o° F., much lower therefore than that of either of the constituents. This looks like a mystery at first sight, but it may be readily explained.

A solid body cannot become liquid without absorbing heat, and the heat which has been used up in the work of changing a solid into a liquid does not show on the thermometer. It seems to disappear in the body, and hence is called *latent* heat. For example, a pound of ice at 32° F. cannot be changed into a pound of water at 32° F., unless it can absorb as much heat as would, if properly applied, raise the temperature of another pound of water through 80° F. Now when ice and salt are placed in contact they will melt together, on account of their attraction for each other. Hence the chemist contends that the action lies in his department. On the other hand, in order to melt they must get heat, honestly if they can, but anyhow they must get it, and if you do not supply it in the shape of fire, they will take it from each other or from surrounding bodies. The heat which they steal becomes latent, i.e., does not show up on the thermometer, and therefore something has become sensibly colder. If that something is cream and fixings you will have ice cream, if it is simply water, you will simply have ice. method of manufacturing ice would be practically useless, for, first, you must have ice to begin with, and that is hardly fair; and moreover, there are scientists who hold that the amount of ice so manufactured could never even theoretically be greater than the amount consumed. With this opinion we beg respectfully to disagree, at least until further proofs are adduced. But, secondly, it takes a good deal of labor to mix that ice and salt thoroughly, so as to obtain the best results. Thirdly, you must use a very large quantity of salt, itself worth much more than the ice produced. It can indeed be recovered by evaporation of the water, but the space required for this, and the time and labor consumed, combine to render the whole process altogether too expensive.

However, we need not give up yet; since we have struck a principle, let us see what there is in it. When a solid dissolves in a liquid it becomes itself liquid, and according to what we have said, it must absorb heat in so doing. When true chemical combination takes place between the substances heat will be produced, and if that heat happens to be just enough to take the place of what has become latent, then there will be neither rise or fall of temperature. If the heat produced by the chemical action be more than enough for this, there will be a rise in temperature corresponding to the difference. If again, there be less heat evolved by the chemical action than that which becomes latent, or especially if there be only solution and no chemical action, there will be a fall of temperature, and that fall may be considerable.

About the best machine, working on these lines, was invented by Mr. Toselli, in Paris, France some 20 years ago. In this machine the lowering of the temperature was accomplished by the dissolving of nitrate of ammonia in water. It worked well enough on a small scale, and would produce a few pounds of ice at a time, but the output bore no

reasonable proportion to the labor and time spent, or to the mess it got up generally.

There may be a great deal of truth, but there is not much poetry, in writing the record of failures, and up to the point we have reached, there had been no real practical success. Let us turn to something better.

III. Physico-mechanical Processes.

Ice is now made on a commercial scale by the occlusion of heat, which takes place when a liquid passes to the gaseous state. The liquid employed in the earliest machines was water. The ice-machine of Carré was of this kind. Now, although the amount of heat rendered latent when water passes to the gaseous condition is about seven times as great as that which becomes latent when ice becomes liquid, yet, water evaporates too slowly to make the machine work satisfactorily. To aid it, Carré made use of an exhausting pump, and the vapor of the water was besides brought into contact with strong sulphuric acid, by which it was rapidly absorbed. The acid was diluted by this process and had to be removed and replaced by a fresh supply. This in itself would be a fatal objection to any attempt to work the machine on a large scale.

We come now to the really successful ice-machine. There are many liquids which when evaporating produce intense cold, but we need not enumerate them now. The one which has given the most satisfaction and is displacing all others is liquid ammonia. We do not mean the ammonia water of the drug store; that is merely a solution, more or less strong, of ammonia in water. We mean the pure, anhydrous (waterless) or dry ammonia gas, which has been condensed to a liquid by pressure and cooling. The difference between this liquid and water, for the end here in view, may be seen from this, that water boils, i.e., passes into the gaseous state, at 212° F. in the open air; whereas this liquid, or liquified ammonia, boils at 38° below zero, or 250° below the boiling point of water. No out-door temperature ever experienced on the eastern coast of the United States, would be low enough to keep this liquid from boiling away. This is just the kind of stuff we wanted. Besides, in evaporating, it absorbs a very large quantity of heat, which is another good point; and lastly, it can readily be condensed back to the liquid state again, and this is its third trump card.

The ice plant is set up substantially as follows: First, there is the refrigerator in which the freezing is to take place. It is a long rectangular, iron tank, in which the moulds containing the water to be frozen are hung. The refrigerator itself is filled with strong brine, which may be cooled far below the freezing point of water without being itself congealed. In the bottom of the refrigerator are coils of iron pipe, which are connected at one end with the supply of ammonia, and and at the other with the suction pipe of a powerful steam pump. Next, we have the steam engine to run that pump. The delivery pipe of the pump is connected with other coils of pipe constituting the condenser. The coils of the condenser are enclosed in a tank, through which water, as cold as is obtainable, is kept constantly flowing. From these con-

densing coils a pipe leads back to the ammonia tank, and so the cycle is complete. Now let us see how the machine works.

A valve is opened, and the liquid ammonia rushes into the refrigerator coils, evaporating as it goes, and this evaporation is further aided by the pump which now starts up. The evaporation cools the ammonia, the ammonia cools the coils, the coils cool the brine (considerably below the freezing point of water), the brine cools the moulds hanging in it, the moulds cool the water they contain; and that water soon begins to freeze. The moulds are moved slowly along in the brine, and when the contents of the first one is solidly frozen, it is hooked out, dipped in warm water to detach the block of ice, which is then cast forth à la Jonah; then the mould travels back to be filled again, and takes its place in the rear of the icy procession which keeps up its solemn tramp, day and night, through a sort of artificial glacial period.

We must not forget our ammonia. Having done its work, we might imagine it would be let off on a holiday. By no means, for, if corporations have no souls, machines have no consciences, nor machine-men either, for that matter. The ammonia enters the pumps in the gaseous state; the pump drives it on, under continually increasing pressure, and by the aid of the cooling-water, condenses it to a liquid again, in which state it flows back to the supply tank, and so it is used over and over again. After all, the real work is done by the steam engine and the cold water; the ammonia only serves as a go-between to carry the heat away from the brine to the cooling tank where it gives it up, and then goes round the back way seeking for more.

Machines of this kind have been constructed, capable, it is said, of producing 150 tons of ice every 24 hours; and, exclusive of the care of the steam boiler, one man at a time is enough to run the whole concern.

If the water used has not been deprived of its dissolved air in freezing, it will imprison some of this air in the shape of bubbles, and the ice will not be perfectly transparent. There is no harm in this, except that such ice wastes away more rapidly in use. This defect is remedied by stirring the water continually during the process of freezing, or better by using only distilled water from which the air has been carefully excluded. A block of ice made by this process is a joy to look on and an ornament to any home.

The question now arises as to how this artificial ice compares with nature's product. As regards cost, that depends on circumstances. If we are allowed to choose our own battle-ground, we have no fear of the result. We would not, for example, set up an ice plant in Alaska, nor in Labrador, nor indeed in any part of the world "where there are nine months of winter, and where all the rest of the year is very cold." We would choose a more temperate region, where however we could be sure of a good supply of moderately cool water, the year round. Give us the climate of our Southern States, or something even hotter, and we will come out ahead. There is no doubt but that ice can be manufactured in New Orleans cheaper than it can be carried there. Under

fairly favorable circumstances, it is said that it could be produced at from 75 cents to \$1.25 a ton.

There is however, still another aspect to this question, and it is this. When you manufacture ice from day to day, according as it is needed, you are not obliged to keep it in stock, and lose half of it by melting before it is put to use; and what is more important still, what is in fact the most important thing, is that you need not make it of dirty or doubtful water. In those places where natural ice is plentiful and cheap, it may be used for all mere external refrigerating purposes; but when there is question of our internal economy, give us the pure, manufactured article, or give us—none at all.

T. J. A. FREEMAN, S. J.

Book Jotices.

DIE GROSSEN WELTRÆTHSEL. PHILOSOPHIE D. NATUR. Von Tilmann Pesch, S. J. Zweite, Verbessete. Auflage Erster Band, Philos. Naturerklärung. Pp. xxv., 799. 8vo. Zweiter Band. Naturphilosoph. Weltauffassung. Pp. xii., 616. Herder: St. Louis. 1892.

One of the points strongly urged on Catholic philosophers by Leo XIII., in his memorable encyclical, "Æterni Patris," was, that they should make a thorough study of the physical sciences, and bring to bear on a radical explanation of what these sciences have thus far discovered, the principles and certain deductions of the scholastic metaphysics. In consequence of the papal utterance, there has been a marked improvement during the last decade in the character of our literature dealing with questions of natural philosophy. Of the monographs that have appeared, Father Pesch's large work, "Institutiones Philosophiæ Naturalis"—an integral part of the "Cursus Lacensis," publishing by the Jesuit professors formerly of Maria-Laach—merited the first place in point of merit until the appearance, three years later, of the first edition of the same author's more comprehensive work, the second edition of which is now before us.

The title of these volumes is purely conventional. The fundamental questions regarding the nature, origin, destiny, of itself and its environment, which the human intellect is instinctively urged to put—and the answers to which sound philosophy, starting from the basis of common sense, satisfactorily presents—have become, in the minds of many latter-day thinkers, "enigmas," "riddles," and so are called. Though, in fact, there are no such enigmas, but only problems, suggested by consciousness, yet in deference to usage, Father Pesch retains the term. He employs it, however, not to designate all, even of the more radical, enigmata or problems of nature, but to cover hardly more than those which constitute the subject-matter of Natural Philosophy, in the technical accep-

tation of this branch of knowledge. A difficulty to the building of a philosophy of nature lies in the way. Is such a philosophy, or, in other words, is a metaphysic of the physical sciences possible? Empiricism, Positivism, says, No. Our author opens his work with a vigorous onslaught on this popular movement in modern thought. Working pretty much on the lines he had adopted in his "Institutiones," referred to above, he carefully maps off the boundaries between natural science, pure and simple, and natural philosophy, and shows how the human mind, by its natural constitution as revealed in the data of consciousness, cannot be satisfied with the explanation of cosmic phenomena proposed by physical science, but must press onward and upward to the higher reasons set forth by philosophy. Empiricism contradicts itself by denying the metaphysical order, and at the same time accepting, as it everywhere does in physical science, the principle of causality, and the validity of sense-perception, both of which truths have no meaning if there be no really objective sphere of metaphysical truth.

Father Pesch next takes a defensive position for the peripatetic philosophy of nature. He shows that the Aristotelian philosophy as perfected by the early and later scholastics was by no means a purely a

priori system. This is sufficiently evident from its fundamental teaching that all knowledge begins with the senses, though as our author admits, "experimental study of nature was in fact and not in principle too much neglected by mediæval philosophers." He points to the primary concepts of the old philosophy, to its true dualism in the constitution of matter, of living beings, especially of man, of the world, and shows how these form a basis for a solid philosophy of nature. Farseeing scientists are feeling to-day more than ever before the need of a root science which shall co-ordinate and present an ultimate harmonious explanation of the data of the various physical sciences. The cry is "back to the old philosophy." But where is the "old philosophy?" Surely not amongst the myriad theories that have sprung up and crumbled to ruins since the day when Descartes first put his hand at system building. Nor yet in the schools of Greece alone; but in that structure "which based on the developed culture of pre-Christian antiquity, was, until the begining of the last century, the shelter of the profoundest thinkers in the Christian church, the profoundest thinkers therefore of three-fourths of Europe—a structure which starting from experience and, reared in closely jointed parts, rises into the sphere of the supersensible, a proof that the human mind builds beyond the plain where eye and hand and fancy work" (p. 108).

Father Pesch goes on to sketch the history and development of natural philosophy from its beginning with the Ionics to the completion of the Aristotelian system by the scholastics—a completion, however, which he insists is but relative to the time and circumstances of the builders. The peripatetic philosophy of nature needs considerable pruning, whilst its principles must be much more fully developed and applied. It must enter more critically into the study of facts and give up its too great adherence to the "words of the master." And yet whilst admitting that in explaining the mechanico-material side of nature we must advance considerably beyond the science of the olden times, he claims, nevertheless, to show in the main body of his work "that the needed corrections lie only on the surface, that the deeper philosophic conception of nature remains quite intact; to show, moreover, that it is the philosophy of the ancients and it alone which is in a position to solve the 'enigmas' which physical research proposes' (p.141).

He then proceeds to classify and describe the root concepts of natural science: matter, its properties, states, movements; energy, its unity and conservation; law, finality, etc.

The various philosophic theories—the mechanical, dynamic, chemico-atomic—that have been devised to furnish an ultimate explanation of these concepts are examined, their inadequacy demonstrated; a comprehensive study of the peripatetic system as to the essential constitution of bodies, their properties, and relations in space and time; as to the constitution of living things; the nature of man in his lower and higher life; as to the origin and final cause of universal nature, is set forth in extenso.

"Two fundamental conceptions of the universe stand to-day in con flict or rather have always been in strife for the mastery over man's life. On the one side the Theistic-Christian, which, so far as the might of human thought extends—raises itself on the basis of the Platonic peripatetic philosophy. On the other side, conscious or unconscious Atheism. . . . Monism is the tower of Babel set up by atheistic speculation. In one or another form Socialism and Liberalism build upon it" (vol. ii., p. 2). Monism banishes from science and philosophy all dualism as to body and soul, the world and God. One entity, it is

claimed, lies at the bottom and pervades all that is or at least all that

appears to be.

The greater part of the second volume is taken up with a refutation of the various Monistic theories. Probably its most telling, as it certainly is the most interesting section of this part of the work is that dealing with mechanical Monism—the theory which resolves the totality of being into atoms and motion. Our author examines this theory as regards the origin of the elements and their movement, the origin of man, the descent and transmutation of organic species. The Darwinian hypothesis is especially dwelt on. The arguments for and against the various theories of evolution are thoroughly and fairly stated, but the outcome is decidedly to the detriment of those theories inasmuch especially as they bear upon man's higher and moral life.

The work closes with an excellent treatise on the dualistic position of Christian philosophy, showing that Theism alone can give a logical account of the world, its origin, order, development, conservation and finality, particularly in view of the rational principle in human nature. Especially satisfactory is the last chapter on man in his relation to God, wherein the inability of the leading modern theories to account for or to furnish a philosophic basis for religion is proven, and the true nature and

source of religion admirably set forth.

What we have said will suffice to show the general character of this important work. The subjects it treats are too large to permit our going here into anything like detail. For the rest, we find in these volumes that same comprehensive grasp of his subject, that familiarity with the entire range of pertinent literature, ancient and modern, that wonderful analytical power, that facility of exposition which have made Father Pesch's "Philosophia Naturalis," and his "Institutiones Logicales," such valuable aids both to professor and to student, while the general reader seeking to widen his philosophical culture is presented with as facile an instrument as the nature of the subject-matter will allow; for the author has succeeded in brightening the obscurer ways of thought by the charms of rhetoric.

The improvements brought into the present edition are not of an essential character. The more recent scientific literature has been collated, some abbreviations and expansions made, but on the whole the work is substantially the same as it appeared in the first edition.

Sociale Frage und Sociale Ordnung; oder Institutionen der Gesellschaftslehre. Von Fr. Albert Maria Weiss, O. Pr. Erster u. Zweiter Theil. Freiburg im Br. St. Louis, Mo.: B. Herder. 1892.

The so-called "Social Question" has different aspects, each of which constitutes a more or less predominant element, according to the ideals of the various parties who seek its satisfactory solution. In the popular mind it is associated, if not identified, with the "labor question," and it must be allowed that the growing opposition of labor against capital has brought on a crisis and practically constitutes the difficulty with which modern legislators have to deal.

But the social question is not a purely economical problem which arbitration on lines of equity and common justice could settle. It has its moral phases also, and these go to its very root and origin. The general discontent of the laboring classes is not so much a revolt against oppression as rather the conscious awakening of some new power in their possession of which they were hitherto ignorant. The animal which before this freely gave its milk to those who knew how to utilize

it to further purpose has found a way to refuse the nourishing commodity except it have free access into the clover-patch. As a result, the cow ails from the unrelieved pressure on its udder, and the master, in addition to the loss of the milk, is in danger of being struck by the irritated animal. The veterinaries are called in. They disagree. One advises to let her into the clover-field. The owner objects because there is not enough to last all the year round, and says that this process would, after spoiling the animal's appetite, end in starving both master and cow. A second says: The milk belongs to the cow, therefore he who wants it must purchase it on her own terms. A third insists that the cow and the master, both being animals, are equal, and if the latter cannot hold his own against the cow's superior strength he must yield to the inevitable law of "survival of the fittest."

In such fashion do the popular charlatans of social reform outargue

each other on the basis of truisms half or wholly ill applied.

There are, indeed, men of more earnest thought and endeavor who recognize that the remedy of the existing economical evils must be applied to the inner organism in the first place, and that the general discontent which manifests itself in different classes of society is mainly the outcome of illusory views and aspirations produced by a magnifying mirror, which in reality hides what lies beyond it and what consti-

tutes man's legitimate aim.

In France, where "Socialism" has reached an extreme of anarchism, Le Play was one of the first in our day to raise a strong bulwark against the radical notions of compulsory division of property by the state, which largely affected the populace of the industrial districts. He founded a new school of social policy, the Union de la paix sociale, which, by means of agitation and through its organ, the Reforme sociale, has made numerous converts in influential political circles in France and elsewhere. Le Play believes that the evils which afflict society at present are mainly due to the disorganization of family life, and he seeks accordingly the remedy in a reform of the family. The basis of this reform is to be laid in the restrictions of the Decalogue as appealing to the conscience of all right-minded men. However good this plan in the abstract may seem, it is insufficient to cope with the real issues of socialism. The present laxity of the family ties and the lowered moral standard of domestic obligations have their origin, if rightly considered, in the prevailing social doctrines of our day; they are not the result, but the cause-or, at least, the accompaniment-of the general deviation from the higher moral standard. It is true that the reform of society must begin in the family as an integral part of the civil community, but it is still more true that it must begin by an appeal to stronger and loftier motives than those held out by the natural law as formulated in the Decalogue. If it must be admitted on all sides that the Christian religion is an improvement on the Mosaic law, and that European civilization in its highest forms is a result of the doctrine and maxims of our Lord, then it is obvious that a complete remedy of the ills of which society complains is to be sought in the application of Christian principles,

Such is the reasoning to which P. Weiss applies himself, and his test is as infallible as the doctrine upon which he bases it. He arrays before us the palpable facts which make up the present situation—public life under the influence of modern ideas and ideals. State-absolutism, the right of Revolution, Liberalism as the enemy of the supernatural, and Socialism in all its forms are examined in their various manifestations. Next the nature and attributes of Right in the physical, moral, social

and supernatural order are defined and compared. The third part of the work deals with the elements of the social fabric, the individual and its relation to property and labor. In the fourth place we have the

family in its origin and resultant responsibility.

The second volume comprises the treatment of the "social problem" proper. The author sketches the difficulties and the remedies offered from different quarters, showing the insufficiency of each in turn. He then points out in detail the means which Christianity, and the Catholic Church in particular, has at hand for the readjustment of the existing troublesome elements.

It is not within our scope as reviewer to repeat in substance the principal arguments of the author. Suffice it to say that he treats the subject with a master-hand and upon lines not marked by the leading of doubtful human knowledge, but in the light of revealed and *à priori* certain truths.

The two volumes before us, though complete in themselves, are part of a series in five volumes, entitled "Apology of the Christian Religion Viewed from the Point of Moral Culture."

The work has been well received by European scholars, and we commend it to all those who are interested in the study of social and political economy.

Most Reverend John Hughes, First Archeishop of New York. By Rev. Henry A. Brann, D.D., Rector of St. Agnes' Church. New York: Dodd, Mead & Company. 1892.

In a compact volume of somewhat less than two hundred pages Rev. Dr. Brann has presented the American public with a "popular" life of the great Archbishop of New York, who so well deserves a place among the "Makers of America." The biography of a man so intellectual, so forceful, so active as an ecclesiastic and as a citizen, deserves attention from men of every denomination and from men of no denomination. Circumstances led the priest, the bishop, the archbishop, to defend the truth, to contend for the right and to oppose error, from the platform and in the press, as well as from the pulpit. The story of his life is, in fact, a most important chapter in the history of the American people, and of the Catholic Church in the United States. To the Catholics of to-day, and also to non-Catholics, this chapter of our history should teach many valuable lessons.

The early struggles of John Hughes convey a lesson in strong purpose that may well be taken to heart by all young men. The record of the priesthood of Father Hughes, no young priest can read without benefit. As bishop, as archbishop, how many lessons his life and work taught and teach laymen and cleric! A man of faith, he was none the less

a man of tact and of courage.

The prejudices that hampered the Catholics of his day, Father Hughes, Bishop Hughes, Archbishop Hughes fought persistently and successfully. He did not uproot prejudice, but he limited its growth, he discouraged the sowers of the seed, and, above all, he encouraged those who suffered from the pest. He united Catholics in an orderly and manly defence of their rights as citizens. Thus they forced respect and made the cultivation of prejudice unprofitable.

Reverend Doctor Brann is in full sympathy with the great Archbishop of New York. Every page proves this sympathy. Indeed, few who read the writer's concise, lively and forcible book can withhold admiration from his "hero." Probably the chapters in which the author

gives an account of the archbishop's action during the public school controversy in New York will excite more than common interest at this time, when the question of education is so widely discussed, and when it has, in more than one State, been made a political question. Those who would wholly divide religion from politics, comparing Rev. Dr. Brann's pages with the columns of the newspapers and periodicals of to-day will see that, in the nineties as in the forties, religion and politics may collide. The politician always looks upon religion as a convenient part of politics.

Archbishop Hughes was no politician. He was a patriot, a deep and warm lover of his adopted country, ever working for her advantage and ever ready to serve her. One of the most admirable chapters in Rev. Dr. Brann's admirable book is devoted to the subject of the archbishop's patriotic action during the Civil War, and of his effective diplomacy at the Court of Napoleon III. Reading this chapter we ask ourselves: Why have not our citizens, regardless of party, erected a memorial statue to the patriot who saved us from foreign intervention at a most critical time?

The influence of Archbishop Hughes on our literature has not received from our writers the attention it deserves. Reverend Doctor Brann has a suggestive chapter on this subject, and we hope that his criticisms and the extracts he quotes from poems and letters may lead some one to make an exhaustive study of the works of a writer who handled subjects so many and various.

Is it not worthy of remark that the publishers of this life of the Most Reverend John Hughes are not Catholics? And is not their imprint a proof that there is no lack of readers for books written by Catholics? To Catholic writers it must be gratifying to feel that they may hope for a market and a public through the commercial enterprise of non-Catholics. Congratulating Rev. Dr. Brann on the care given by the publishers to the make-up of his book, we must also congratulate him on the very readable and instructive volume that we owe to his virile pen and to his thoughtful mind.

DIE APOSTELGESCHICHTE UEBERSETZT UND ERKLAERT. Von Dr. Joseph Fellen, Professor der Theologie an der Universität zu Bonn. Freiburg and St. Louis: Herder. 1892. Price, \$3.00.

This latest work of a writer already well known to learned Catholics by reason of important labors, chiefly in the domain of mediæval church history, takes the form of a jubilee gift to the Archbishop of Cologne on the fiftieth anniversary of the ordination to the priesthood of that eminent prelate. It is a gift worthy of the renown of the donor and of the dignity and virtues of the venerable recipient, and we have no doubt that Archbishop (now Cardinal) Krementz prized this intellectual jewel far more than offerings of gold and silver. It is a jewel which will not be jealously concealed in a treasure-chamber, but which will find its way into distant lands and, we trust, into many languages, to the glory of the author and of his superior, and, what is of infinitely greater value, to the glory of God and of His Church.

Of all the books of Holy Writ that of the Acts of the Apostles, or, as St. Chrysostom seems to call it, the Acts of the Holy Ghost (τῶν παρὰ τοῦν πνεύματος εἰργασμένων), is the most appropriate for satisfying the daily needs of the clergy; for, as Archbishop Krementz beautifully remarks, "The reading of the Acts is perhaps, more than any other reading, able to revive in our souls that grace which was given us through the imposition of hands." What a privilege it is for the missionary priest to be

able to live in familiar intercourse with those two great exemplars of missionary activity, Sts. Peter and Paul! In this inspired book all the apostolic men of subsequent ages have found precedents to guide and sustain them, and St. Luke may be said to have laid down the model followed by every hagiographer from his age to our own. In order to convince one's self of the large influence which has been wielded by this one book in forming the habits and customs of the Christian community, one need but endeavor to eliminate from his mind his reminiscences of the Acts, and observe how wide is the gap which he would The Acts, therefore, ought to occupy a very prominent place in the education of Catholic youth, especially in the Seminary, and the fact that St. Luke's style is more polished and classical than that of any other inspired writer points out his work as eminently the proper text-book to be placed in the hands of young students of Greek; in fact, a school edition of the Acts, with historical and geographical notes, would be a most acceptable addition to our somewhat meagre repertory of biblical text-books. We have many professors in the land quite capable of undertaking this good work, and we earnestly hope some one of them will set about it very soon. In the preparation of such an edition Dr. Felten's commentary would be of the greatest utility, for every conceivable question relating to his subject the Bonn professor has touched off with the comprehensive simplicity and vigor of a master hand. It is safe to say that he has not overlooked a single item of interest from beginning to end. He shows an acquaintance with the literature of the subject, whether patristical or modern, whether Catholic, Protestant or infidel, which is simply amazing; and what is still more admirable, in the midst of this erudition he maintains his calm appreciation of the true scope of the inspired book. A spirit of genuine Catholic piety pervades the book, and the impression left upon the reader is one of solid Christian edification. Let us have it in an English dress, and may all Catholic commentators study Felten's method of combining vast erudition with simple Catholic faith.

HIERURGIA; OR, THE HOLY SACRIFICE OF THE MASS. With notes and dissertations, elucidating its doctrines and ceremonies, and numerous illustrations. By Daniel Rock, D.D. Third edition revised by W. H James Weale. Vols. I. and II. London: John Hodges, Agar St., Charing Cross. New York; Benziger Bros.

This is a new edition of an old work. We are delighted to give it greeting, and are sure the clergy generally will hail it with pleasure. The end and aim of the author is principally to explain the ceremonies and elucidate the doctrine of the Mass. And that end he has accomplished with a fulness and a scholarship rarely met with in works of the kind. His method, too, we greatly admire. In the first part the author gives us the Ordinary of the Mass, in Latin and English. Then we have about eighty pages of most valuable notes, explanatory of the ceremonies of the ritual of the Liturgy. The second part of the work the author devotes to a plain, solid, learned exposition of the doctrine of the Eucharist as a sacrifice and a sacrament; of the Church's doctrine on the Invocation of Saints, on Purgatory, on Images and Vestments. A most excellent feature of this splendid work are the copper-plate and wood engravings executed by artists of noted ability.

Knowledge, it is said, is power. In the kingdom of God—in spiritual things, knowledge is love. Men do not love God, because they do not know Him. Now if there be one thing, of which more than all other things men ought to have clearest knowledge, it is the Mass—the great

sacrifice of the new Law. That men generally have not this clearest knowledge of the Mass, that they see it only in a dim way, and are unconscious of its wondrous beauties and consequent efficacy, is a wellknown fact. How little is known of the higher, spiritual, symbolic meaning of the prayers of the Mass! And yet there is so very much in that meaning that would go far to lift up the heart to God. And so, too, with the other rites of the Church. The people come and gaze, and their wonder grows, and there it ends. They have not caught the spirit of the feast or the ceremony; they have not been impressed, and as far as they (the people) are concerned, the grand rite or ceremony has been barren of results. This is certainly a deplorable fact. And in the light of that fact we can estimate in a measure the value of such works as the "Hierurgia." The "Hierurgia" ought, in the first place, to be in every priest's library, It ought, in the second place, to form the foundation of a priest's sermons on the Mass and ceremonies. Why cannot we have more books of this kind? Above all things we need such books for the people. Some one has said that dogma is the soul of devotion. A fuller, a more intelligent understanding of the Mass and its ceremonies will infallibly lead men nearer to God. Give us more books of this kind and give them to us in popular form. The people need them, the interests of God demand them.

- DIE PSALMEN, NACH DEM URTEXTE UEBERSETZT UND ERKLAERT. Von P. Friedrich Rafft, O.S. Fr. III. Band. Herder: Freiburg and St. Louis. 1892. Price \$2,35.
- DIE PSALMEN DER VULGATA UEBERSETZT UND NACH DEM LITERALSINN ERKLAERT.
 Von Gottfried Hoberg, Professor der Universität Freiburg. L. Herder: Freiburg and St. Louis. 1892. Price \$2.90.
- PSALLITE SAPIENTER, "PSALLIRET WEISE!" Von Dr. Maurus Woller, O.S.B. Second edition, Herder: Freiburg and St. Louis, 1892. Vol. iii., \$2.50; vol. v.. \$2.25.

If the Catholics of Germany do not perfect themselves in the knowledge of the divine psalmody, it certainly will not be the fault of the great publishing house of Herder. Three different expositions of the Psalms in one year! This is equally creditable to the enterprise of the publishers and to the piety of the clergy and faithful people of Germany. The immediate aim of the three authors is different. Raffl (who, strangely enough, has begun at the end in true Hebrew fashion) is chiefly concerned with the original text, in dealing with which he displays a thorough mastery of the cognate Oriental languages; Hoberg, as his title indicates, is intent upon elucidating the Vulgate; whilst Wolter writes for the people, enabling them to enter into the spirit of the liturgy of the Church. We fear this edifying activity of our brethren in Germany cries shame upon our own apathy.

Die Lehre von den Heiligen Sacramenten der Katholischen Kirche. Von Dr. Paul Schanz, Professor der Theologie an der Universität Tübingen. Herder; Freiburg im Breisgau. 1893. Price \$3.50.

Any one who has read Dr. Schanz's Christian Apology will need no introduction to the profound theologian of Catholic Tübingen; for, strange as it would sound to one who knew Tübingen a generation ago, that picturesque little university town, the whilom "home of the advanced school of theological criticism," is becoming even more identified with solid orthodox Catholic thought. Towards this transforma-

tion Schanz has contributed a powerful share; and his present great work on the Sacraments will be recognized as the crowning effort of his life. It is, indeed, a fitting sequel to his former work; for having laid the deep foundation of Catholic truth in his Apology against modern infi-delity, he now proceeds to overthrow the basis of modern heresy which is nothing more than a denial of the sacramental character of the Christian religion. After the exhaustive controversies of the past three hundred years, the issue between Catholicity and Protestantism has narrowed itself down to the question of the nature and efficacy of the Sacraments. To admit the sacramental doctrine of the Catholic Church is equivalent to admitting the whole body of her teaching. Naturally enough; for Lutheranism and its off-shoots were, radically, erroneous conceptions respecting the Holy Sacraments. The author, following the traditional and rational manner of treating his subject, discourses during the first two hundred pages on the general nature, the institution, the efficacy and number of the Christian sacraments, and in the remaining five hundred and fifty pages deals with the seven sacraments in particular, extracting throughout from the well filled treasury of his soul nova et vetera. A fuller review will be given of this grand work when it is translated into English, as we pray it soon may be.

JESUS THE ALL BEAUTIFUL. A devotional treatise on the character and actions of our Lord. By the author of "The Voice of the Sacred Heart," and "The Heart of Jesus of Nazareth." Edited by the Rev. J. B. Macleod, S. J. London: Burns & Oates, Limited. 1892.

This is a well-written book. It is clearly thought out and in style far above the ordinary. It is, however, a book for the educated. In conception and tone of treatment, it is clearly above the grasp of the people. It is not what we call a popular treatise. Whether such character in a devotional work can be looked upon as an imperfection offers much ground for debate. Some there are who think that way; and many indeed who think as evidently the author thinks. Of the chapters of the book, we like best those which treat of the authority and gentleness of our Lord. They are quite suggestive and worthy of thoughtful study. We wish this work all success.

ENCYCLOPAEDIE UND METHODOLOGIE DER THEOLOGIE. Von Dr. Heinrich Kihn, Professor der Theologie an der Königl. Universität Würzburg. Freiburg and St. Louis: Herder. 1892. Price, \$3.

The aim of the author of this latest addition to the works making up Herder's Theological Library is to take a general survey of the entire field of theology and to show the logical connection between its different parts. It is a work of vast erudition, and betrays such an intimate acquaintance with every department of theological science that the learned author would seem to be thoroughly at home, and, indeed, a specialist in each particular branch. We can easily believe his assertion that the book represents many years of severe study. But it is worth all the labor he has bestowed on it.

A BRIEF TEXT-BOOK OF LOGIC AND MENTAL PHILOSOPHY. By Rev. Charles Coppens, S.J. New York: Catholic Publication Society Co. 1892.

The aim of this little volume, in the modest words of the author, is simply "to present to pupils unfamiliar with Latin a brief outline of a

sound philosophy conformable to the teachings of the schoolmen." It is chiefly meant for "class use in academies and similar institutions"; and we will add, for use in our Catholic reading circles, to which we take great pleasure in heartily recommending it. We conceive that, in the hands of a good director, it would soon make logic and mental philosophy extremely popular with our young men and women.

THE CEREMONIES OF SOME ECCLESIASTICAL FUNCTIONS. By the Rev. Daniel O. Loan, Dean, Maynooth College. Dublin: Browne & Nolan. New York: Benzinger Brothers.

This book has no preface, and we do not know why it was published. It is a good book in the sense that it treats of good things, and treats of them well. It is also well printed on good paper and it makes an attractive volume. But why should we have a ceremonial on some ecclesiastical functions and why particularly on those ecclesiastical functions? Have we not already many excellent ceremonials that treat well not only on those ecclesiastical functions, but on all others that concern a priest in his ordinary labors? It is certainly most desirable, especially for busy men, to concentrate information as much as possible, and therefore we do not see the advisibility of publishing a partial ceremonial. This does not detract at all from the excellence of the book in itself; the reputation of the learned author is a sufficient guarantee of that; but we do not like its limitations.

Theologia Pastoralis Complectus Practicam Institutionem Confessarii.

Autore Jos. Aertnys, C.SS.R. Theologiæ Moralis et S. Liturgiæ Professore.

Tornaci: H. et L. Casterman. 1892. Received from Burns & Oates.

This little book is intended by its learned author to be the sequel to his larger work on Moral Theology. It is replete with practical instructions guiding the young confessor in the exercise of his god-like mission. The author draws his maxims from the most approved authors and from his own varied and intimate knowledge of human nature. We know of no other book of equal dimensions so well fitted to put an old head upon young shoulders, which is the English of young presbyter.

Analysis of the Gospels of the Sundays of the Year. From the Italian of Angelo Cagnola. By Rev. L. A. Lambert, LL.D., author of "Notes on Ingersoll," "Tactics of Infidels." New York, Cincinnati, Chicago: Benziger Bros., Printers to the Holy Apostolic See. 1892.

We like this book; it is just what the busy, overworked priest desires. In three or four, or five, or six questions and answers it gives him a splendid digest of the gospel for each Sunday. It is most suggestive and quite practical.

We gladly recommend it to our clergy. They will find it a most valuable assistance in extempore preaching.

THE MARRIAGE PROCESS IN THE UNITED STATES By Rev. S. B. Smith, D.D. New York, Cincinnati, Chicago: Benziger Bros. 1893.

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Die Bergpredigt Christi in Ihrem Organischen Zusammenhange Erklaert. Von *Dr. Hugo Weiss*, Ord. Professor der Theologie am Königl. Lyceum Hosianum zu Braunsberg: Freiburg and St. Louis: Herder. 1892. Price, 75 cts.

A concise and learned commentary upon the Sermon on the Mount, dedicated to the younger clergy, to whom it will serve as an excellent model of popular exegesis.

BOOKS RECEIVED.

- ENCHIRIDION AD SACRARUM DISCIPLINARUM CULTORES ACCOMMODATUM, OPERA ET STUDIO ZEPHYRINI ZITELLI-NATALI, Editio quarta emendatior, cura A. J. Maas, S.J. Baltimore: John Murphy & Co. 1892.
- DIE HAUPTPROBLEME SPRACHWISSENSCHAFT IN IHREN BEZIEHUNGEN ZUR THEO-LOGIE, PHILOSOPHIE UND ANTHROPOLOGIE. Von Dr. Alexander Giesswein. Freiburg and St. Louis: Herder. 1892. Price, \$2.
- JOHN LOCKE UND DIE SCHULE VON CAMBRIDGE, Von Dr. Georg Freihernn von Hertling. Freiburg and St. Louis: Herder. 1892. Price, \$2.

From Benziger Brothers, New York, Cincinnati and Chicago:

- THE CREED EXPLAINED; or, An Exposition of Catholic Doctrine, according to the Creeds of Faith and the Constitutions and Definitions of the Church. By the Rev. Arthur Devine, Passionist.
- Words of Wisdom from the Scriptures. A Concordance of the Sapiental Books, Prepared from the French (Migne's Collection). Edited by John J. Bell. With a preface by Very Rev. A. Magnien, S.S., D.D.
- A GENTLEMAN. By Maurice Francis Egan, LL.D.

From Burns & Oates, London; and Benziger Brothers:

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CHRISTOPHER COLUMBUS: His Life, Labors and Discoveries. By Mariana Monteiro.

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EDUCATION IN ANCIENT BABYLONIA, PHŒNICIA AND JUDEA.

O part of the globe has more ancient and more memorable records than the strip of Asia that stretches from the Ægean Sea to the Gulf of Persia. None has so profoundly influenced the fortunes of mankind. Here, Scripture tells us, was the home of Noah's family after the Flood; here, the great city of Babel, memorable for the confusion of tongues, whence Noah's descendants scattered to people the earth. Here was the country of the daring Phœnician seafarers, who roamed from land to land past the straits of Gibraltar to the coast of Cornwall, bringing commerce and carrying civilization. Here was the land promised to Abraham and his seed, which the Son of God chose for his abode on earth, and from which went forth Christ's kingdom conquering and to conquer. Surely the scene of events so pregnant with man's weal and woe has powerful claims to our interest. For centuries before the advent of Christianity the culture and civilization of Western Asia influenced the culture and civilization of the most progressive nations of Europe, and even to-day our daily life is profoundly influenced by the races that dwelt in far remote ages between the Tigris and the Ægean. If, then, there be a vital connection between a people's civilization and its education, the learning and schools of the Babylonians, the Assyrians, the Hebrews, and the Phænicians must powerfully interest the serious student of history and philosophy.

Let us first turn our footsteps to the valley of the rivers Tigris and Euphrates. Here lay the great cities of Babylon and Ninive; here were Ur of the Chaldees, whence God called Abraham to the

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land of Canaan, and Harran, where the patriarch dwelt on his way to Palestine; here stood Sepharvaim (Sippar), the city of the books, as the Bible calls it; here, in fine, was the seat of the great Empires of Babylonia and Assyria. Fifty years ago, except some notices in the Greek writers, all we knew of these countries was what Scripture tells us of their relations to the kingdoms of Israel and Judea. The Greek reports were at second hand, for Herodotus, the father of history, visited Babylon, if he visited it at all, only after it had become the capital of a Persian province. Ninive at the same time had lain a heap of ruins for two hundred years. Of the works of Berosus, a Babylonian priest, who wrote the history of his country in the third century before Christ, there remained only a few fragments. The Bible includes only a few chance references to earlier Babylonian history, but becomes somewhat fuller, when, in the eighth century before Christ, the kings of Assyria stretched forth their arms to bring the kingdoms of Israel and Juda under their power. Then we hear of the great Sargonide princes. Salamanasar, Tiglath-pileser and Asarhaddon. But the conquest of the Hebrew kingdoms was, after all, but an episode in the history of Assyria and Babylonia. To impress us with the scantiness of their knowledge historians discussed the question whether Assyria and Babylonia were one or two empires. To-day all this is different. The excavations of Layard, Botta, Rassam, George Smith and de Sarzec and the decipherment of the cuneiform writing by Rawlinson, Hincks and Oppert have revealed to us the life story of two great empires and laid open to our astonished gaze one of the oldest, if not the oldest, civilization of the world. Our account of Assyrio-Babylonian education will be based chiefly on the native monuments and documents made known to us by these explorers and scholars and by the able men who have taken up their work.

To set in its true light our picture of Babylonian education, thus traced, we must premise a few words about the history and chronology of the peoples that dwelt in the valley of the Euphrates. Modern research has proven beyond doubt that the Babylonians and Assyrians, as well as the later Chaldeans were of Semitic extraction. Their language was closely akin to the Hebrew, and the portraits they have left of themselves and their kings at once suggest their relationship to the Jews. But these Semitic nations were not the original inhabitants of the country watered by the two great rivers of Mesopotamia, nor were the culture and learning of Babylon and Ninive built up by them. To the Sumerians and Accadians belongs this proud honor. Before Babylon became the capital of a great Semitic empire, the kingdom of Sumir and Accad had flourished and passed away. Who

were these Sumerians whose very names were unknown to our fathers? Oppert, Lenormant, Sayce, Schrader, Tiele, Hommel, Haupt, Winckler, Kaulen all agree that they were a race nowise allied to the Semites; according to many Assyriologists they belonged to the Ural-Altaic or Tartaric family of peoples, the same to which belong the Magyars, the Turks and the Fins in Europe. Their language was agglutinative, i.e., it appended to an unchangeable stem, one or more transparent suffixes. In the structure of its sentences it was in strong contrast with the language of their Semitic conquerors. Before the Semites appeared in the Euphrates Valley these Sumerians had built up a culture, which may well amaze us, if we reflect how very remote was the day of their power and prosperity. They had laid the foundation of the arts and sciences, of sculpture and architecture, of arithmetic and astronomy; they had collected a code of laws; they had invented and developed a system of writing. When the Semitic Babylonians established themselves on the bank of the Euphrates and Tigris, they were illiterate and uncultured. From the Sumerians they borrowed their art. their science, and their system of writing, nay, to a large extent, their ideas of the gods and their mythology.

If the question be asked, "When did all this take place?" we must confess our ignorance. Ancient as some of the Babylonian monuments claim to be, none are so ancient as to reach times when the Semites were not yet in the land. The most ancient king of Babylonia, made known by the monuments thus far, Sargon I., of Agade or Agane, bears a Semitic name, and the very language of the oldest Sumerian inscriptions, Orientalists tell us, betokens that it was already decaying. When did Sargon I. live? thousand eight hundred years before the Christian era, most Assyriologists tell us. This venerable old gentleman, whose son Naram-Sin has left us some inscriptions and whose own cylindrical seal is now said to be in the British Museum, is assigned to this remote date on the authority of Nabonidus, the third successor of Nabuchodonosor, and the last king of Babylon. This monarch, in rebuilding the temple of the Sun God at Sippar, found its original foundation stone, which contained the documents enclosed by its founder, Naram-Sin. Nabonidus was proud of his discovery, which he mentions six times, speaking of Naram-Sin and his father as very ancient kings. Once only he assigns a date to them: Sargon reigned 3200 before his own day, i.e., 3800 B.C. But Winckler justly observes that it is quite unlikely that the wise men of Nabonidus had an unbroken series of documents enabling them to determine the date of Sargon. Nabonidus's date is therefore a guess; it means merely that the Babylonians considered Sargon a very ancient king. So much for the oldest date in Babylonian history. M. de Sarzec has found some very old inscriptions at Tello, but we cannot fix their date, at least at present.

If now we look for the earliest date in Assyrian history that is reasonably certain, the latest authorities are unanimous in fixing it in the neighborhood of the year 900 B.C.1 The chronology of Babylonia is in a far less satisfactory condition. Hommel with the help of various lists of kings has constructed a chronological system exact to within ten years, as he claims; it extends to the year 1730 B.C. However, the gaps in the list of names are so numerous, that even if we were ready to suppose that the Babylonian tables were originally without error, we should still have our doubts regarding Hommel's dates. But who will guarantee that the Babylonian lists are without flaw in their numbers? Tiele, we are inclined to think, is much safer, when he puts the limits of certainty in Babylonian chronology at about 900 B.C.² Ptolemy's canon takes us to the year 747 B.C., the so-called era of Nabonassar. Beyond that we have a list of Assyrian Limu, which takes us to the date in question.3 From 900-1900 we are not without fairly reliable data in regard to Babylonian chronology. Perhaps we might extend this period to about 2250 B.C.; but beyond that point, all is guesswork, that may go astray five hundred years almost as easily as fifty. One more observation, before ending these preliminary remarks. The Babylonians, Assyrians, and Chaldeans were three Semitic nations, each of which at one time was the ruling people of Western Asia. There was not one Assyrio-Babylonio-Chaldean Empire, but three empires, the Assyrian, the Babylonian, and the Chaldean. The first two, however, overlapped each other, both in time and space. earliest of the three was the Babylonian, which became an empire some say 2250 B.C., others 1850 B.C., when Hammurabi, sixth king of the Zabu dynasty conquered Iri-Aku, the Elamite, King of Larsa.4 The time of Hammurabi, and his immediate successor was the golden age of Babylonia, which remained an independent kingdom till it was absorbed by the Sargonide kings of Assyria (709-626 B.C.). The early sovereigns of Assur, whence the name of Assyria, were not even kings. They call

¹ Hommel, Geschichte Babyloniens und Assyriens, p. 178. Winckler, G. Babyloniens und Assyriens, p.181. Tiele, Babylonisch-Assyrische Geschicte, p. 92.

² Tiele, Babylonisch-Assyrische Geschichte, p. 92.

³ As the Romans designated each year by the consuls thereof, so the Assyrians named the year after an officer called *Limu*. Lists of these *Limu*, compiled for chronological purposes have been found.

⁶ The date is very important for early Bible history. Lenormant, Vigouroux and Hommel (*loc. cit.*, p. 168), identify Iri-Aku with the Arioch, king of Ellasar, of Genesis, xiv., 1. Hommel considers Amraphel, king of Sennaar, to be the same as Hammurabi's father, Amar-Muballit.

themselves Patesi, i.e., priest-kings, of whom the earliest known to us by an inscription, Samsi-Rammon, Son of Ishmi Dagan, is assigned to about 1800 B.C. Of the Assyrian kings, properly socalled, the first was Assur-bel-nishi-shu, about 1500 B.C. The empire of Assyria ended with the destruction of Ninive, 605 B.C. With this date begins the new Chaldeanempire, founded by Nabopolassar, the father of the great Nabuchodonosor. Its prosperity was short-lived. On July 5th, 539 B.C., Babylon was entered by Gobryas, the general of the Persian king Cyrus, and Babylon fell, never to rise again.

If the use of written symbols implies the existence of schools, schools in Mesapotamia must antedate the earliest princes we hear of in Babylonian history, Sargon of Agade and the kings and patesi, whose inscriptions have recently been found at Tello. The cuneiform system of writing found in these inscriptions is so complicated, as we shall see, that only long and systematic instruction and study could enable a scholar to master it. But putting aside these remote ages, there can be no doubt that in the reign of Hammurabi, the founder of the Babylonian empire, well-developed institutions of learning must have flourished. Not only does this follow from the fact that even at that early period (B C. 2250) deeds of sale and contracts of importance were recorded on clay tablets, but also from the numerous translations then made from the Sumerian into the Babylonian language. To this indirect testimony we can add the direct statements of contemparary documents. From a tablet entitled by Oppert and Lenormant the "Story of a Foundling," and shown by Hommel to have been translated about this time, we learn that the foster father of the foundling in question caused him "to be taught the art of writing and gave him an education." In a list of omens, also of this date, we learn that a child born with six toes will not go to school. As we descend the ages, proofs of the existence of schools multiply. While the chief writings left us by Naram-Sin, old Sargon's son, were the documents enclosed in the corner stone of the temple of Shamash, at Sippar. Assyrian kings, especially since Assur-nassirpal (880 B.C.) set up statues and other monuments with inscriptions, sometimes quite lengthy. Why these inscriptions if reading was the privilege of the few? Why the libraries, founded not only in Babylonia, the home of culture, but also in Assyria? Long before Babylon rose to power Sargon I. of Agane, we are told, founded a library. But even if this statement be rejected we know that in many of the great Babylonian temples libraries existed at an early period. Assur-bani-pal had copies made in the

¹ Before him the kings of Babylon were local princes.

² Hommel, Geschichte Assyriens und Babyloniens, p. 387-8.

libraries of the temples at Uruk, at Kutha, at Larsa and at Agade. Senacherib founded a library at Ninive, where, in George Smith's opinion, 20,000 fragments of Assyrian books will reward the explorer that will give the time and money to dig them out. At Calah there was a library in charge of one of the astronomers of Sargon II. (721 B.C.) and Senacherib (704 B.C.). But to Assurbani-pal (668-626 B.C.), the last mighty king of the Sargonide dynasty, belongs the honor of having founded the greatest of all the Assyrian libraries in his palace at Nineveh. There he gathered, not by violence or plunder, but by sending forth his scribes to make copies of works preserved in the old Babylonian libraries, a collection of 30,000 clay tablets. In view of these vast accumulations of books, the copying of which must have employed an army of scribes, who will hesitate to admit that there must have been schools and numerous schools in the lands of Assur and Bel? The dupsars, or scribes, for the most part priests, must have been a large and important class, though they did not enjoy the same honor as their Egyptian brethren. Their services were in demand everywhere. The king called on them to write and read his dispatches, to calculate the courses of the stars and the eclipses of the moon, to foretell the future, to make known to him the laws, to immortalize his achievements; the general had him at his side to jot down the details of his battles, and to sing the praise of his exploits; the judge used them to record his decisions and to make him acquainted with the laws of the forefathers; and every Babylonian summoned them to record deeds of sale, adoptions, wills-in fact, records of any business transaction of importance. How fond the Babylonians were of multiplying documents one example will show. In 1874, George Smith bought a collection of about 3000 small tablets found by the Arabs in the ruins of Babylon. These were the famous Egibi tablets, a part of the contracts made by the Babylonian banking firm of Egibi & Sons in the course of several hundred years. But how many tablets had been lost? We may remark, by way of parenthesis, that Delitsch thinks Egibi to be the Babylonian transcription of Jacob, and holds that the Egibi were a Jewish banking house.

From very early times, therefore, schools were plentiful in Babylonia and Assyria. They were equally so under the Chaldean kings in the sixth century, before our era. The great Nabuchodonosor (604-562 B.C.) had the prophet Daniel, one of the Jewish captives, instructed in the wisdom and language of the Chaldeans. He and his companions attended a school in the king's palace along with the children of the Chaldean nobles. The young

¹ Daniel i., 4.

Hebrews were treated just as Senacherib had treated Belibni, a young Babylonian, whom he afterwards made king of his native city. In view of all these facts we may, without hesitation, put aside the statement of Diodorus Siculus, that the Chaldeans derived their learning from family tradition, the father being the teacher of the son. He was evidently misinformed; a fact which is not surprising, as he wrote many centuries after the fall of Babylon. Possibly, however, he had in view only the Chaldean magi and their astrological lore.

If we ask how far education was diffused among the people, the answer is not so easy. There are facts that seem to imply a wide diffusion of the art of writing. The numerous contract tablets, many as old as the first Babylonian dynasty and the reign of Hammerabi, appear to favor this view. But the contracts are always drawn up by a dupsar or scribe. The signatures of the contracting parties are replaced by the seal of the signer in the case of the rich and noble, or by the certified nail mark? of the less wealthy. This took the place of our cross. It might, therefore, happen that none of the principals or witnesses of a contract knew how to write, except the scribe or priest. Still, the Babylonians took elaborate precautions against forgery. Every important contract was written on a clay tablet, which was then baked. When the clay had hardened, a new layer covered the first copy of the contract, and on this new layer a second copy was engraved, and the tablet baked a second time. In case of dispute the outer shell was broken and the copy compared with the original. Unless, therefore, the priests or scribes were the forgers, we must presume that there were laymen well able to write. Maspéro thinks that the common people read the simpler astrological calendars.³ In Sayce's opinion some of the Babylonian libraries were for general use: Tiele, however, holds that they were intended for the exclusive use of the king, his scribes and sages, for the instruction of his sons, and of the future magistrates of his empire; they also served as state archives. They do not, therefore, prove the general spread of learning in Babel and Assur. Writing, Tiele adds, was certainly not a general accomplishment.⁴ The extreme complication of the cuneiform system of writing speaks for this view, for even to learn to read it, must have been the work of years. In the centuries immediately preceding the destruction of Nineveh, say from the eighth century before Christ downward, the business classes seem

¹ Vigouroux: La Bible et les Découvertes Modernes, iv., p. 446.

² The scribe wrote alongside of the nail-mark the words: "The nail-mark of, e.g., idding"

^a Maspéro: Ægyöten und Assyrien, p. 327.

⁴ Tiele: Babylonische Assyrische Geschichte, p. 582.

to have acquired the art of writing, but they did not write in cuneiform characters. In contracts of that period we find the cuneiform text annotated in Aramæan script; in other words, in the alphabet invented by the Phenicians, which is the source of our own letters. Sometimes signatures are found in similar characters, but they are so far undeciphered. At this period, too, under Assur-bani-pal, women, also, the daughters of well-to-do merchants, were taught this accomplishment.1 Certain it is the royal princesses had it, for on a tablet of the time of Assur-bani-pal's son, Assur-itil-ilâni-ukinni the king's daughter expels from the royal harem one of her relatives with the words: "No longer shalt thou write thy tablets, no longer recite the words (atâ) of thy lesson (embu) (?)."2 On the other hand, Assur-bani-pal's own words have led more than one Assyriologist to doubt whether all the kings of Assyria were able to read and write. "Palace of Assur-bani-pal," so reads the subscription of one of his tablets, "king of the universe, king of Assyria, to whom Nebo and Tashmit have given open ears, who received clear eyes for the preparation (?) of tablets, while under the kings, my ancestors, nothing of the kind had been received, etc." And again, "This writing, to which no king before me paid attention, the secrets of Nebo, the contents of the library I caused to be written on tablets, etc."4 Lehmann goes so far as to say that we may not assume that any Assyrian king could read or write, unless we have a clear statement to that effect.5 Indeed, when we call to mind the amazing military activity of most of the Assyrian kings, when we recall that kings like Assurnassir-pal (885-59 B.C.) and Tiglath-pileser III. (745-28 B.C.), the opponent of the Jewish king Azarias, sallied forth from Kalah or Ninive, year after year, at the head of their armies, and marched from Elam in the east to Tyre in the west, from the mountains of Armenia to the shores of the Persian Gulf, we can well believe that these ancient war-horses resembled Marshal Blücher rather than Marshal Von Moltke, and seldom cudgelled their brains by deciphering cuneiform rebuses. However, we should not confound the Assyrians with the Babylonians. While the kings of Assyria and their nobles remind us of mediæval conquerors and their barons. the Babylonians leaned much more to a life of ease and consequently of culture. But even of the monarchs of Ninive, who were the lineal successors of the priest-rulers (patesi) of Assur, it is hard to believe that they were men ignorant of reading and

¹ Maspéro: Ægypten und Assyrien, p. 241.

² Hommel: Geschichte Babyloniens und Assyriens, p. 695, note.

⁸ Hommel: *loc. cit.*, p. 88.

⁴ Kaulen: Assyrien und Babylonien, p. 165.

⁵ Berliner: Philologische Wochenschrift, 1892, p. 431.

writing. How wide-spread was the knowledge of the Babylonian system of writing is apparent from its diffusion among neighboring nations. The Armenians, the Elamites, the Mesopotamians of Mitani, the Canaanites of Palestine, the Persians, even the Cappadocians of Asia Minor, used the cuneiform symbols. The discovery of the Tell-el-amarna tablets in 1888, proves that the vassals and governors of Egypt, under Amenhotep III. and IV. (fifteenth century, B.C.), made their reports to these Pharaohs in the Babylonian writing and language. Weighing all the evidence, therefore, we may safely conclude that if there were no common or district schools in Babylon or Ninive, there must have been, beside the court schools, many temple schools scattered throughout the cities of Bel and Assur, and that after 800 B.C., these must have been greatly multiplied.

What was the character of the temple and palace schools of Babylonia and Assyria? On their discipline and internal arrangement modern research has thus far failed to shed much light. From the fact that special libraries existed in special temples, it is not improbable that special schools were connected with the temples in question. In the temple school of Larsa, therefore, which had a library rich in mathematical works, mathematics was specially cultivated. Astrology was the favorite subject at Agade. while the so-called Izdubar epics were chiefly studied at Uruk. As no numerous school can exist without classes, the scholars in Babylonia no doubt were classified. But of examinations and methods of teaching we hear nothing. Fortunately, however, the library of Assur-bani-pal has given us a glimpse of most of the subjects taught, and preserved for us some of the school books of Assyria. As it has been clearly proved, that in every department of learning the northern Assyrian Empire was only the heir and imitator of the Babylonians, and as the languages of the two countries were practically the same, all that we shall learn of the schools of Assur may be applied to the schools of Babylon and vice versa.

The Assyrian scholar of course, began his studies with learning to read and write. This was a formidable task. Instead of twenty-six letters, the cuneiform has upward of six hundred signs. But this is only the commencement of the difficulty. If every sign had one fixed value or followed one certain principle of interpretation, reading while not easy, would offer no phenomenal difficulties. But a cuneiform sign sometimes stands for an idea (ideograms), sometimes for a word, or rather a word-like combination of sounds, sometimes for a syllable; sometimes it is not pronounced at all, but indicates that the word before which it is placed, belongs to a certain class (determinatives). Most symbols represent syllables, without reference to their meaning; of these syllables some are

simple like ar, vi, ra, ri, others more complex like dar, rup, vus. But very many of these syllabic signs, may also be used ideographically, i.e., stand for words. The sign for "father" is read abu when it is used ideographically, but also represents the syllable at; a sign for "year" reads sanat, but as a syllable mu; a third sign may be read chab, kir, rim, or lagab. The writer is at liberty to use his sign for any of the values that belong to it and may place an ideogram in the midst of several syllabic signs, leaving the reader to guess what value to attach to it where it stands. result may be divined by imagining how hard it would be to read English, if it were allowed to write every word after the fashion we sometimes see exemplified in a rebus. Thus if "elementary" could be written either lmntare, or elmentry or lemntre; or "oftentimes" were represented by of 10 mes or of 10x, or of $x \times 10^{-10}$ we should be making some progress toward the cuneiform system. To read an ordinary sentence, where the meaning helps to suggest the words, would be like deciphering riddles; to read proper names, with no guide at all, especially such names as the Babylonians were blessed with, is often next to impossible. To illustrate let us take the Biblical name Nabuchodonosor. Its Chaldean form turns out to be Nabukudurusur. If the word were written ideographically, and then read phonetically, we should call it, as was done by the first decipherers, An-pa-sa-du-sis. If written syllabically it might appear either as Na-bu-u-ku-du-ur-u-sur or Na-bu-kud-dur-ru-su-ur, or in ten other and widely different forms; the signs ku, and kud, however, would suggest no similarity in sound as ku and kud do in English. Then we might have a mingling of ideograms and syllabic signs and find AN-Pa-kudu-ur-SIS. Let the reader remember, that this is no fine-spun theory but precisely what the Assyriologist meets with every day. That this script offered great difficulties to the old Chaldeans themselves, is manifest. Hence in Professor Kaulen's opinion, if the Chaldean sages failed to read the fateful words " Mane, Thekel, Upharsin" written by the mysterious hand at Belshazzar's feast, the failure was due in part to the difficulties inherent in the Chaldean system of writing. Be that as it may, we have convincing proof that the Assyrians were fully conscious of these difficulties. In Assur-bani-pal's library have been found a large number of tablets, covered with vocabularies and syllabaries, i.e., lists of cuneiform signs with their phonetic or ideographic equivalents. These lists may have been consulted at times by puzzled Babylonian dupsars, but they also and perhaps chiefly served as spelling books, as Menant, endorsed by the Abbe Vigouroux, holds1. Representing

¹ Vigouroux : La Bible et les Découvertes Modernes, iv., p. 444,

the cuneiform sign by X, Y, Z, we may convey some idea of these syllabaries by the following illustration:1

		Meaning and
Pronounced		read ideographically
phonetically,	Sign,	in Assyrian,
a-na	x	shamu (heaven)
di-in-gir	Y	ilum (god)
na-ah	Z	nab·bu (sky?)
mu-lu	X1	Kakkabu (star)

It is worthy of remark that the phonetic equivalents in Assyrian are the old Sumerian words (ana, dingir, nab, mul), for heaven, god, sky (?), star, whence it is inferred that the Babylonians borrowed these characters from the Sumerians. Copies of these lists were placed before the scholars and they were made the basis of reading lessons.

Many Assyrian scholars, as we have seen above, were content if they learned to read; and no wonder. A ready reader of these riddles must have had his wits unusually sharpened, and probably considered himself quite a clerk. Besides, the complexity of many of the cuneiform symbols and their number made writing very difficult. Of course this did not prevent many from undertaking to learn it. These were at first made to write some of the signs explained in the syllabaries, and then copied short sentences sometimes of a proverbial character, such as our calligraphic copybooks contain to-day. We subjoin a few Assyrian specimens: "Door and bolt are made fast-Oracle to oracle; to the oracle it is compared—A heap of witnesses as his foundation he has made strong-By himself he has dug and wrought-The joists of his wall he plasters—The tenant of the farm two-thirds of the produce to the master of the orchard pays out." These samples taken from a Sumero-Babylonian reading book, do not err on the side of idealism. Here and there the student was made to copy bits of verse, and these are not quite so practical and homespun. "If evil thou hast done, to the sea forever thou goest-Like an oven which is old, against thy foes be hard—The fruit of death may the man eat, the fruit of life may he achieve." 1 The prose sentences quoted are from a collection of agricultural precepts first written in old Sumerian. The copies that have been found contain the Accadian or Sumerian original with a Babylonian translation. They were used to learn to read and write not only Babylonian but also Sumerian, which the Babylonian priests

¹ To guard against misconception, it is necessary to state that other syllabaries contained only two columns, one of signs, one of phonetic values. A tablet of this sort contained when intact, the explanation of 360 signs.

² Records of the Past, 1st series, xi., p. 151.

regarded as a sacred language, and cultivated, as Catholic priests study Latin. Bertin tells us¹ that in the British Museum there is a clay exercise-book on which some of these precepts have been copied three times over for practice. Of these precepts there was originally quite an extensive collection, comprising ten or twelve tablets, each holding about four printed 12mo. pages of matter. Most of them contained agricultural precepts, one at least, precepts for a man's guidance in private life. To show how intensely utilitarian was the instruction of these Babylonian temple schools even in what we might call the lowest classes, we quote the translation of column I. in Bertin's translation.²

II. "In the sixth month of the year the farmer marks his estate. III. He agrees about his covenant. IV. He completes the wording of the covenant. V. He collects his tax gifts and surrounds the field with hedges. VI. He collects his flock and gathers the birds. VII. He works from dawn to dusk. VIII. When the time for working the field comes, he ploughs, rakes and divides it. IX. For every 60 measures of grain the farmer takes 8 measures of wheat produce, straw in stokes, grain thrashed and winnowed."

We must not forget the writing implements of our Babylonian school-boy. In later Assyrian times, subsequent to the year 850 B.C., the scribes sometimes used skins, tablets and papyrus, on which they wrote with reed pens in characters derived from the Phænicians. They used these chiefly to jot down hastily memoranda not intended to last. In some of Assurbanipal's historical bas-reliefs we see scribes on the battle field taking an inventory of the booty in this manner. But though the marshy soil of Chaldea, on the shores of the Persian gulf abounded in reed plants, from which paper might have been made, the ordinary, and in ancient times, probably the only writing material were tablets of clay. Among the very ancient statues found by M. de Sarzec at Tello, is a seated figure with a clay writing tablet on his knees,4 while another represents the patesi, Gudea, as an architect who has drawn the plan of a fortress on a similar tablet.⁵ On a tablet is found the writing exercise we have referred to above. Such a tablet, therefore, the Babylonian scholar held on his knee; the side on which he was to write was covered with clay, still soft and impressible. On this he engraved his wedge-formed signs with a stylus having a triangular point. When the writing was finished, the tablet was hardened by baking.

¹ Bertin in Records of the Past, series ii., vol. iii., p. 92.

² Op. cit., p. 94. Paragraph I. is missing.

⁸ I.e., with his tenants.

⁴ Babelon, Manual of Oriental Antiquities, p. 28-9.

⁵ Ibid., p. 81.

When the student had mastered the elements of reading and writing he began to practice the art he had acquired, by reading selections from the rich treasures of Babylonian literature, a great part of which was inherited from the Sumerians. Consequently with these Babylonian language lessons was combined the study of the sacred Sumerian originals. The comparison of the two languages directed attention to grammatical forms and the relation of derivatives to their parent words. In the schools of Babylon, therefore, were sown the earliest germs of grammatical science. teresting to observe that even in Hammurabi's age, two thousand years before the Christian era, the advantages of studying a foreign language were practically demonstrated. We have already spoken of the Babylonian vocabularies and syllabaries. Besides these. Assur bani-pal's library has furnished us paradigms both of nouns and verbs, lists of words derived from the same parent word, and collections of phrases. The following is a sample of what we may call declension. The left-hand column gives the Sumerian word, the right-hand its Semitic or Babylonio-Assyrian equivalent.

ki-ni-ta = itti-shu (with him). N.B. ki is Sumerian for place. ta is a post position, hence ki-ni-ta = in his places.

ki-ni-ni-ta = itti-shunu (with them).

ki-mu-ta = itti-a (with me).

ki-mi-ta = itti ni (with us).

ki-zu-ta = itta-ka (with thee).

 $ki \cdot zu - ni - ni - ta = itti - ku - nu$ (with you).

Notwithstanding the hoary antiquity of civilization and literature on the banks of the Nile, the Egyptians never made the first step in the grammatical analysis of language. Even in Greece, the golden age of Pericles had long passed before grammar was begotten almost as the posthumous child of the Socratic philosophy. If, then, the Semitic Babylonians in this respect outstripped the men of Athens and of the hundred-gated Thebes, we may justly ascribe it to the influence of their Sumerian studies.

To ask what were the reading books used by the temple schools of Babylon is to open a large field of inquiry. We begin with literature. The simplest narratives and those best fitted for the elementary scholar were the fables. The stories with which we instinctively connect the name of Æsop were known to the Babylonians even before the time of Hammurabi, the founder of their empire (2250 B.C.). In Smith's "Chaldean Genesis" are found fragments of fables entitled "Story of the Goat," "Story of the Ox and the Horse," "Story of the Serpent God," and others.

Far more ambitious and suitable for riper scholars were the

¹ Hommel, loc. cit., p. 387.

Babylonian epics, such as the legend of Ishtar's descent to Hell, and the Izdubar or Nimrod epic. Among these none have attracted more attention than the so-called Legends of Creation, of which the story of the Deluge is an episode. Its author, Sinliki-unnîni, says Hommel, must have lived not long after the 23d century B.C.¹ As a sample of these Babylonian epics we subjoin a passage from the Deluge episode in the Izdubar epic, as given by Jensen. The reader will recognize at once its resemblance to the Scripture narrative.

When the seventh day came,
I sent forth a dove and let her fly. The dove flew to and fro,
But as there was no place for her to perch on, she returned.
Then I sent forth a swallow and let her fly. She flew to and fro,
But as there was no place for her to perch on, she returned.
Then I sent forth a raven and let him fly.
The raven flew about, saw the disappearance of the water,
Approached, [scream]ing and crying, but he returned not.
Then I opened the ship, offered a sacrifice towards the four winds,
Brought a propitatory offering on the top of the mountain.

Strange though it may seem at first sight, in most literatures poetry precedes prose. In Greece, Homer precedes Herodotus; in Rome, the old Saturnian verses were the only literature known before Greek influence laid the foundation of the classic literature of Rome. Among the Teutonic tribes, as Tacitus tells us, heroic ballads were the only form of records known in his day. In Babylonia, too, the great epics antedated every attempt at history. Still the Babylonians, and especially the Assyrians, were by no means devoid of the historic sense. The institution of special magistrates (the limu, referred to above) to serve as a basis of chronology would alone prove this. Furthermore, they have left us chronicles, some of which extend over several centuries. The so-called Synchronous History of Babylonia and Assyria is, perhaps, hardly entitled to its high-sounding name. It is an abstract of the treaty relations of the two empires, including, however, a brief account of the wars, that for the most part preceded the treaties. For the most part no attempt at literary effect is made in these chronicles. As might be supposed from his taste for literature in general, Assur-ban-ipal has left us annals, in which we cannot fail to recognize an attempt at literary embellishment. That these annals and chronicles were studied in the priest school seems certain; some historical tablets, with lists of Babylonian kings and the contemporary sovereigns in other places, have been recognized as schoolboy exercises. To infer, thence, that these old Semites

¹ Hommel, Geschichte, Babyloniens und Assyriens, p. 394.

² Jensen, Die Kosmologie der Babylonier, p. 381.

valued history for its own sake, however, would be hazardous. The annals were studied for utilitarian reasons. The Babylonians were so precise in their legal instruments, deeds, contracts, etc., that they could not get along without these chronicles. Among them, therefore, history was not studied as a means to promote culture or patriotism, but merely and wholly as professional knowledge.

The other studies pursued by the scholars of the temple schools in Mesapotamia, bore the same utilitarian character; this should neither surprise us nor lessen our interest in Babylonian education. The schools, no doubt, chiefly served utilitarian ends; they were to provide priests for the temples, judges, scribes, notaries, administrators, architects and astrologers for the King. The far extending dominions of the Assyrian monarchs, the countless minor states subdued by their arms and governed by their satraps, for instance, made an attempt at descriptive geography a necessity. How crude and odd their geographical science, if it deserves the name, was, will appear from a specimen.

- I. The country of x^1 let it be explained as the country of Bel. . . .
- 3. The country of Amanus as the country of cedars. . . .
- 5. The country of Lebanon as the country of cypresses. country of Assur as the country of 1
- 8. The country of Sargon² as the country of books. country of Sepek as the country of allanu.
- 17. The country of Milukhkha³ as the country of turquoise. The country of Maganna as the country of copper.
 - 25. The river Tigris let one explain as the bringer of fertility.
 - 26. The river of Euphrates as the life of the world.
- 27. The river Arakhtu (Araxes) as the river which flows into Babylon.
- 31. The river of the mighty waters as giving life to the enclosure of life.6

In natural history the Babylonians were interested for the same practical reasons. Of the hundred dependent states that paid them tribute, perhaps a few sent them silver and gold. Most of the tributaries paid their taxes in kind, forwarding rare animals or minerals, as well as corn and other food products. Naturally this led to comparison and classification, and modern scholars assure us that the Assyrians really showed talent in the direction of biology.

¹ The name is lost.

² i.e., Aganê or Agadê. Compare Kiryath-Sepher—the city of books in Jos. xv.,

⁸ Meroe in upper Egypt; but perhaps a part of Libya or Arabia is meant.

⁴ The Sinaitic peninsula.

⁵ Records of the Past, ser. i., vol. xi., p. 147 ff Most of these geographical lists are from Assur-bani-pal's library, but many were copies of more ancient tablets.

They made attempts at classifying animals, which show that they had rational principles of comparison. The dog, lion, wolf (carnivora) belonged to one class, the ox, sheep, goat (herbivora) to another. Of dogs they distinguished the following species: the house-dog, the hound, the lap-dog, the dog of Elam. They classified birds as birds of prey, water-birds, marsh birds, etc. We see they recognized genera and species. Besides its popular, each animal had a scientific name.

Arithmetic next claims our attention. Its utilitarian character is self-evident, and this leads us to expect that the Babylonians cultivated it with much earnestness. Accordingly we find that the Greek philosophers speak in terms of high praise of the mathematical achievements of the Babylonians. Our knowledge of detail, however, is for the most part derived from the cuneiform monuments. It is based chiefly on some tablets found in the ruins of Senkereh, the ancient Larsa. In the temple school of that venerable city arithmetic was cultivated as a specialty, for its library was rich in mathematical works. Let us see what they tell us of Babylonian arithmetic.

To begin with numeration.² The Babylonians used both the decimal and the sexagesimal system. In writing numbers, they had discovered the device (which we consider characteristic of Arabian numerals) of placing the unit column at the extreme right and assigning to each column to the left a value tenfold that of its right-hand neighbor. But whether they had perfected this system, by inventing a sign to be placed in the several columns, when the number to be written contained no units of that value, in other words, whether they had invented a nought (0) or zero sign, has not yet been determined. Further excavations at Senkereh, it is hoped, will settle this question. So far the numbers met with are below one million in value; nor should this astonish us. In every day life, even to-day we seldom deal with millions, and few of us conceive what a million means in the concrete. Numeration according to the sexagesimal system was analogous to the decimal system just explained. The right-hand column contains the numbers up to sixty; the next column to the left is for the first power of sixty, the second for the square of sixty, the third for the cube. The square of 16, i.e., 4006 would be written 1.8.16, that is to say $1 \times 60^2 + 8 \times 60 + 16$. In the same manner they express sexagesimal fractions. Of other fractions signs are found for $\frac{1}{6}$, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{2}{3}$, $\frac{5}{6}$, in other words for $\frac{1}{6}$ and its multiples up to the unit. The sexagesimal system was grafted on their method of reckoning time;

¹ Kaulen, Assyrien und Babylonien, p. 169.

³ For simple operations the Babylonians, as all the ancient nations, used their fingers; for more complicated ones the abacus.—Cantor, op cit., p. 84.

for sixty years is the Babylonian soss, $3600 = 60^2$ is the sar, and 600 the ner, a result of blending the sexagesimal and decimal systems. The table of Senkereh exhibits a list of squares and its reverse a list of cubes, which proves that not only the Semitic Babylonians but also their Sumerian predecessors carried on computations involving squares and cubes up to the cube of 60. The sexagesimal system was also applied in astronomy to divide the circumference of the circle into 360 parts or degrees, the degrees into sixtieths (minutes) and these into sixtieths of the second order (seconds).1 This system was subsequently applied to measures of time also. Whenever we look at our watch or consult our maps we therefore use methods of computing, derived through several links, from the Sumerians of ancient Chaldea. The Babylonian system of measures and weights also is an achievement worthy of our admiration, as well as of our gratitude; for our tables of weights and measures can be traced with many modifications, of course, to the Chaldeans of old. Their system of long measure, Hultsch tells us,2 was based on rude astronomical computations. In an hour. they computed, the sun on June 21st, passes over a space equal to thirty times its apparent diameter; in two minutes it passes over the space equal to its own diameter. They then ascertained how far a fast walker could go in the same time, and made this distance, known to us by the Greek name aradow, the basis of their long measure. One-three hundred and sixtieth of the stadion (620 feet) was the cubit or ell (20.7 inches). From this they derived their dry and liquid measure, the maris being one-fifth of a cubic ell, while the light royal talent was the weight of a maris of water.8 The old Babylonian mathematicians, therefore, at bottom, were guided by the same principles on which the metrical system is founded. The Babylonian system of weights and measures was borrowed by the Phænicians, who communicated it with some of the original names (Greek $\mu\nu\hat{a}$ = Assyrian maneh) to the Greeks: from whom after modification it was adopted by the Romans, who, in turn, transmitted it to us moderns. Four thousand years, perhaps more, have rolled by since the men of Babylon devised this ingenious system.

But we must hasten to study their achievements in the field of commercial arithmetic. The Babylonians, it is true, did not invent coined money. This was a triumph reserved for the Lydians or the Greeks. But the old Semitic masters of western Asia had made the achievement easy for them. They had established gold and silver as the measure of value, divided the metals into weights

¹ Cantor, Vorlesungen uber Geschichte der Mathematik, p 72 ff.

² Hultsch, Griechische und Römische Metrologie, p. 383.

³ Hultsch, op. cit., p. 392.

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of convenient size and form for carriage, and made its measurement independent of the ordinary system of weights. Next they established a fixed ratio of value between gold and silver, the formula being 1:13\frac{1}{3}, a ratio adopted by all the civilized nations of antiquity and lasting until the downfall of the Western Roman Empire. While their shekels, manchs and talents were not stamped officially by the state, the Babylonians circulated lenticular pieces of gold and silver going by those names, that served all the purposes of a modern currency. Hence we need not wonder that they invented checks and drafts, with and without interest. Here is a specimen:

FOUR MINÆ OF SILVER (\$180)

of the coinage of Karkhemish, Neriglissar lends to Nabo-sumiddin, son of the crown-keeper, Nabo-rahim-baladin of Dur Saryukin, the same to bear 5 silver sheckels (\$3.75) interest per month. On the 26th of Ijjar of the year named after Gabbaru (667, B.C.).

Money at Babylon we see brought $2\frac{1}{12}$ per cent. monthly, or 25 per cent. per annum, in the first year of Assurbanipal's reign.

In geometry, as far as we can judge, the progress of the Chaldeans was very moderate. Chaldean students were not distressed by any complex problems and theorems. Their geometrical science, as set forth by Cantor, may be resumed in a few lines. The Babylonians were acquainted with parallel lines, triangles, quadrangles, and squares, as also with the right angle, as a geometrical element. Perhaps the right angled triangle with the sides 3, 4, 5, was known to them, though this remains doubtful. They had learned to trisect the right angle, and divided the circumference of a circle into six equal parts by using the radius as chord. In calculating the length of the circumference they used a formula which makes $\pi = 3$. This is the sum-total of the geometry of the Babylonians, as now ascertained. Their knowledge seems extremely fragmentary and limited, especially when we compare it with their acquirements in astronomy.

We have used the word astronomy; we should have said astrology. It seems very questionable whether the Chaldeans ever thought of astronomy as a science. To them it was the handmaid of divination. Their observations of the heavenly bodies were made with a view to gathering materials for forecasting the future. Their so-called calendars, or tables of omens, were constructed very much on the plan of the weather almanacs so well known to our grandfathers and grandmothers, and perhaps not wholly discarded to-day, when the papers daily furnish us the forecasts of the official weather prophets. One of these venerable calendars, the simpler of which Maspéro thinks were understood by

¹ Kaulen, op. cit., p. 173.

the majority of Assur-bani-pal's subjects, was ascribed to Sargon of Agadê. It is quite as unlikely that Sargon compiled this calendar as that he reigned in 3800 B.C., but undoubtedly the document was very old. Nothing will give us a clearer conception of the religious astronomy of the Chaldeans than a brief transcript from one of these calendars: "Month Ab, 16th day—Eclipse of the moon; the king of Accad dies; Nergal, the god (of war), devours the land. 20th day—Eclipse of the moon; the king of the Chatti country dies; the king of the Châte country comes and seizes the throne. Month Elul, 15th day—Eclipse of the moon; the king's son kills his father and seizes the throne; an enemy comes and devours the land." It was the supposed connection between the eclipses and other celestial and meteorological phenomena on the one side, and the fate of countries and kings on the other, that led the Chaldeans from remote antiquity to observe and record the movements of the stars. The nephew of the great Aristotle, Callisthenes, who accompanied Alexander the Great on his Persian expedition, sent his uncle Babylonian astronomical observations which reached back to 2234 B.C. We have reports made to the Assyrian kings by their astrologers which were embodied in the proper temple records; for the astrologers were priests. As no consul at Rome undertook any important work, civil or military, without consulting the birds and the omens, so no king of Ninive began an enterprise without ascertaining that the stars permitted The observations thus taken were studied by aspiring candidates for the Chaldean priesthood, and formed a part of their theological course.

But what advantage did science reap from these superstitious practices? Unlikely, as it seems, Chaldean astrology was the mother of astronomy. With the dross of astrological superstition was mingled many a nugget of the gold of science, which in time was separated from the rubbish with which it was associated, and which has been handed down even to our day. In the first place, the Babylonians knew that 233 lunar months made nineteen solar years; nay, they had a pretty exact knowledge of the slight difference between the two members of this equation; in other words. they knew the year of 365 1/4 days. They divided the year into lunar months, intercalating two months every eighth year, and divided the week into seven days, sacred to their seven great heavenly bodies: Shamas, the sun; Sin, the moon; Nergal (Mars), Nebo (Mercury), Marduk (Jupiter), Ishtar (Venus), Ninib (Saturn). A comparison with these names of the days of the week on the one hand and their names in our own language, and those inherited by the French from the later Romans on the other hand, will show the Chaldean names have lasted to the present day.

Besides the five greater planets, it is probable that Jupiter's four moons were known to the Babylonians; and they clearly distinguished between planets, fixed stars, comets and meteors. Many groups of fixed stars were recognized and named by them, and most of the signs of the zodiac as well as our names for them can be traced back to the star-gazers of Babylon and the land of Sumir. What is still more surprising, heavenly planiglobes on clay tablets have been found, proving that they attempted to represent the heavens graphically. Here the equator was divided into 240° and the ecliptic into 360°. A report in the collection of Sargon II. (721-705 B.C.), refers to observations of the phases of Mercury and Venus. The daily mean motion of the moon was computed at 13° 10' 1", a result which agrees with modern science. They predicted eclipses, though not always successfully. The earth they held to be round, or perhaps it would be more correct to say, they conceived it as half a sphere, for we have no proof that they believed in antipodes. When we bear in mind that these results were achieved with the naked eye, for though a convex lens has been found in the ruins, it is not believed that the astronomers of Babylon had telescopes, we cannot refuse to acknowledge the debt of gratitude under which the Chaldean astronomers have laid their successors.

Astronomy we have said, was studied by the Chaldean priests as a part of their theology, if we may so call it. When we look for their ethical and metaphysical speculations, we are disappointed. Like the Roman religion, that of Babylon and Ninive was practical and liturgical. In their hymns only do we find imbedded their views of the end, the duties and responsibilities of man and his relations to the divinity. That they believed in a future life, has been denied. In 1878, however, Halevy published in the "Records of the Past,"8 two fragments proving that the Assyrians believed not only in a future life, but in the recompense of the just after death. They read as follows: "Lot of the just after death:" 1. Wash thy hands, cleanse thy hands. 2. Let the gods thy elders wash their hands, cleanse their hands. 3. Eat sacred food from sacred plates. 4. Drink sacred water from sacred vessels. 5. Prepare thyself for the judgment of the king of the son of his god (i.e., the just man).—After judgment.—2. They have brought the sacred water. 3. The goddess Anat, the great spouse of Anu. 4. Will cover thee with her sacred hand, 5. The god Iau will transport thee to a place of delights. 6. He will transport thee to a place of delights. 7. He will place thee in the midst of honey

¹ Jenson, Die Kosmologie deo Babylonien, p. 130-1.

² Jenson, op. cit., p. 161.

³ Ser. i., vol. xi., p. 161.

and butter. 8. He will pour into thy mouth reviving water. 9. Thy mouth will be opened for thanksgiving." In a prayer for an Assyrian king we read, "And after the life of this world, at the feasts of the silvery heights, of the court of heaven, in the land of the blessed, and in the light of the fields of the happy, may he lead a life, everlasting, holy, before the face of all the gods that dwell in Assyria." It is true, however, that some texts speak of the life after death as a most doleful existence.

The doctrine of reward and punishment in the life after death, implies the doctrine of merit and sin during man's existence on earth. Among the manifold studies of the Babylonian priest schools, none, perhaps, speaks more powerfully to the modern heart and mind than their psalms. They have much of the ring of the penitential Psalms in Holy Writ. The following psalm addressed to Ishtar, speaks for itself:

"Sublime Lady, whose commands are irresistible,
I will speak this prayer: What is good for me, may she do to me,
My Lady, to me who have borne the yoke of sin since my youth.
Food have I not eaten, weeping was my cheer,
Water have I not taken, tears were my drink;
My heart was merry no longer, my soul was not cheerful, bitterly I wail,
Manifold are my sins, my soul is weighed down,
O my Lady, teach me to know my wrong doing, grant me forgiveness,
Cover up my sins, raise up my eyes."

A passage from another psalm will enlighten us as to what the Assyrians considered to be their duties and what they regarded as sin. It reads like an examination of conscience.

"Have I estranged father from son, brother from brother, friend from friend?

Have I refused to free the captive, to deliver those in bonds and in prison? Have I rebelled against my God or despised my goddess?

Have I taken what belonged to another, or entered my neighbor's house with evil intent?

Have I done wrong with my neighbor's wife?

Have I shed human blood, or robbed any one of his garments?"3

Even the proud Assyrian monarchs were possessed by this feeling of responsibility, and felt deeply their wrong-doing, as appears from this prayer of the mighty Assur-bani-pal: "Lord, extinguish my sins and blemishes before Thine eyes, that I may feel that I am reconciled to Thee. For I am only the slave of Thy power, the adorer of the great gods." What a contrast between this open

¹ Kaulen, Assyrien und Babylonien, p. 146, where several other tests are given establishing this important fact.

² Hommel, op. cit., p. 264.

³ Schmidt-Hannap, Geschichte der Erziehung, i., p. 263.

avowal of sinfulness and responsibility and the haughty selfworship of the Egyptian Pharaohs, who thought themselves the incarnation of Amon Ra!

Very different and far less sympathetic is the impression made upon us by the Babylonian magical formulas and incantations. Among the Chaldeans magic took the place of medicine. Whether a man had a severe headache or suffered agonies from the plague, or struggled with pitiless consumption, he called for the priest, who proceeded at once to exorcise by magic, the evil spirit that caused the sick man's distemper. Many of these magic formulas were stored in Assur-bani-pal's library. Lenormant has written a very learned work on the subject. Along with much valuable lore, the Sumerians had handed down this trash to the Babylonians. When incantations failed. Herodotus tells us, the sick man was taken to the market place, and an appeal was made to goers-by to suggest what their experience told them, might help the unfortunate. Only one medical receipt so far has been found in Assyrian literature; it is meant for the treatment of some skin disease; it prescribes an ointment made of a mixture of water, date sugar, wine, bitter hydromel, the sick man's urine, honey and sweet oil. Evidently, modern doctors, could learn but little from their confreres on the banks of the Euphrates.

From Assyrian bas-reliefs and texts we learn that the religious worship of the people of Ninive and Babylon consisted of hymns accompanied by instrumental music. Music, therefore, was one of the accomplishments taught in the priest schools. Little is known of this branch of instruction, however, except that the chief instruments employed were harps and cymbals.

While considering the liturgical worship of the Chaldeans, we must say a word of the Chaldean Sabbath. Sabbath is an Assyrian as well as a Hebrew word. In the Babylonian legend of the creation the Sabbath is spoken of as a day of rest. To learn the details of the Sabbath celebration as prescribed to the peoples of Assur and Bel, we shall go to an old calendar of feasts, said to be of Sumerian origin. "On the Sabbath Day," we read there, "thou shalt eat no birds and no cooked fruit, nor change thy garments, nor offer sacrifice, nor drive out, nor give laws, nor issue orders, nor take medicine." The passage reads almost like an extract from the New England Blue Laws.

Religious architecture was far less prominent in Assyria than in Egypt. The palaces at Ninive and Babylon, Assur and Calah outshone the temples, though the great *Zikurat*, or pyramid temple at Nimrud, which is identified with the tower of Babel, was perhaps the most striking edifice in old Borsippa. Architecture, however, was probably taught in the temple schools. Of the method

of teaching it we only know that even the priest-ruler, Gudea of Sirgulla (or Sirpulla, or Lagash, as the last authorities call the place), who was an architect, drew on clay tablets regular plans of the structures he proposed to erect. A statue of Gudea has been found, holding on his knees a tablet, with the plan of a fortress with bastions, flanking towers, gates and battlements, drawn to scale, the scale being attached to the plan. Sculpture in stone and bronze, too, was brought to considerable perfection in the Mesopotamian countries, but nothing has been found that throws light on the methods followed in teaching the fine arts. We shall, therefore, pass them over in silence. One remark the reader will pardon. As in Egypt, the most ambitious works of the empire of the Thothmes and the Ramses cannot compare in truthfulness and merit with the Sheikh el Beled and the Seated Scribe, so some of the earliest statues found at Tello by M. de Sarzek far surpass the products of the Sargonides and Nabuchodonosor.

Before concluding this sketch of their education we must say a few words about the jurisprudence of the Chaldeans. We are amazed to see how far back into dim prehistoric times extends the reign of law on the shore of the Gulf of Persia. Before the advent of the Semitic Babylonians the Sumerians had not only laid its foundations, but reared on them a superstructure so firm that it was not shaken when the new comers became the lords of their country. The Sumerian legal system was not merely a primitive attempt to check crime and violence. It regulated family relations, established wise and practical methods for the transfer of property, placed deeds and contracts under the sanction of the law, and provided a fair and reliable basis for commerce. As early as Hammurabi's reign (2250 B. C.) we find numerous contracts drawn to suit the requirements of these laws. Nay, more, even in his reign we find copies of the original Sumerian laws alongside of their Babylonian translations. There can be no doubt that even then, at the very dawn of history, these laws were taught in both languages in well-organized schools. A few specimens of this early product of Chaldean civilization may fitly close our sketch of its education. Their elucidation is chiefly due to the learned Jesuit, Father Strassmeyer, and to M. Oppert.

Law A.—If a son say to his father, "Thou art not my father," the latter castrates his son, puts him in chains and sells him for silver.

Law B.—If a son says to his mother, "Thou art not my mother," he is emasculated, and driven from the city and from home.

Law C.—If a father say to his son, "Thou art not my son," the son is driven from house and home.

¹ Babelon, Manual of Oriental Antiquities, p. 81.

Law D repeats this of the mother.

Law E.—If a wife ill treat her husband, and say, "Thou art not my husband," she is thrown into the river.

Law F.—If a husband say to his wife, "Thou art not my wife," he pays one mina of silver.

Law G.—If an overseer kill or main hired slaves or let them escape, or cause them to fall ill, his hand shall pay the owner half a measure of grain per day.

The later Semitic laws soften these provision in many ways, but also show that the Semites did not treat women with as much consideration as the old Sumerians.

Unfortunately, as we have already said, our documents give us no glimpse of the inner life of the Babylonian school. The family laws, we have cited, make it likely that their discipline was strict, nay harsh. That the schools, being intended chiefly for the instruction of priests and state officers, were state creations, is a safe inference. This is confirmed by the fact that, in Assyria at least, the libraries, even though intended for the people, were founded only by the kings. In Babylonia, we hear of libraries established by private persons. After the introduction of the Aramaic script there may have been private schools. At any rate, in Chaldea, as in Egypt, the aim and object of the schools were directly utilitarian. The love of learning for learning's sake was little, if at all, thought of. Certainly of all the great Assyrian kings, whose monuments have come down to us in large numbers, only Assurbanipal seems animated with a nobler, more idealistic love of learning. But utilitarian or not, Babylonian education was surprisingly advanced for the early period to which we have traced it; Assyriology has revealed to us so many astonishing results that we cannot but regret that it cannot complete the interesting picture of which it has sketched the outline.

Phoenician education should be especially interesting to us. To the old Canaanites of Tyre and Sidon we are indebted for the basis of our own education—our alphabet. Though the Chaldeans were the first successful students of the stars, it was the Phoenicians who spread Chaldean astronomical lore, and applied it to navigation, which they taught to the Greeks and Romans. Lastly to the Tyrians and Sidonians Greece owed its first knowledge of Egyptian and Assyrian art, which the Hellenes so ennobled and perfected. These intelligent and enterprising merchants having by their adaptation, whether of the Egyptian demotic, as E. de Vogūć thought, or of the cuneiform, according to Hommel's views, reduced the written symbols to twenty-two signs, made reading and writing so easy that their education could be largely devoted to the cultivation of literature and science. But while the fates

have been kind to the records of Egypt and Assyria, a cruel doom has well-nigh obliterated Phœnician culture. Though all agree that the Phœnician alphabet originated centuries after the hieroglyphics of Chaldea and Egypt, we cannot say when it was devised. The oldest Phœnician inscription found hitherto is that on the fragments of a patera or bronze bowl, picked up in Cyprus in 1872.1 The archaic type of the letters has led palæographers to ascribe to it a date some hundred years earlier than that of the Moabite stone. The Moabite stone with an inscription in the Moabite tongue, but Phœnician characters, is dated. It was an altar set up by Mesha, the king of Moab, who is mentioned in 2 Kings III. about the year 800 B.C., to commemorate his victory over the Israelites. The Cypriot, or, as it is called by scholars, the Baal-Lebanon inscription, recites that ".... a citizen of Carthage, Servant of Hiram, King of the Sidonians, gave this to Baal Lebanon, his lord, of good brass." If the savants are right, the Hiram here mentioned may be Hiram. king of Tyre, who was Solomon's ally and who helped him to build the great temple of Jerusalem. This, the oldest extant piece of Phœnician writing, goes back to the eleventh century before Christ. But no Orientalist doubts that the art of writing was known in Tyre and Sidon long before Solomon. In the fifteenth or sixteenth century the Egyptian governors of the Phœnician city of Gebal, or Byblus, wrote their reports to Amenhotep IV., in cuneiform characters and in a Semitic dialect. no doubt that Phœnician culture and schools go even further back. Yet, old as Phœnician civilization was, its records are The air of the Canaanitist seacoast did not spare paper and parchment, as the dry Egyptian climate did, nor did the men of Tyre and Sidon, like the Babylonians, commit their thoughts to clay tablets. The devastating arms of Nabuchodonosor and Alexander the Great dealt ruthlessly with their public monuments. The literature of these enterprising mariners fared no better. A scene in one of Plautus's comedies (the Poenulus) is all of their language that has reached us on paper. Some fragments translated or adapted from the Phænician historian Sanchoniathon by Philo of Byblos and the Greek translation of the work of the Carthaginian navigator Hanno, giving an account of his voyage along the west coast of Africa, are the chief remnants of a literature, which, at one time, must have been rich in books. These remnants, as well as the success of the Phœnician shipbuilders, explorers, miners, manufacturers, artisans, artists, architects, merchants and colonizers are a guarantee that they were a people well

¹ Taylor, History of the Alphabet, i., p. 210.

advanced in science and art and well provided with schools; as they dwelt mostly in cities, education among them, in all likelihood, was common. But as we have no remains of their school books, all we can know of their education are inferences from their culture as far as known to us. We shall, therefore, confine ourselves to briefly indicating what were the acquirements in science, in art, what were the principal obligations under which they laid the ancient classical world, and, therefore, us, also, the heirs of Greek and Roman civilization.

That they taught the Greeks their alphabet has already been mentioned. The Phœnicians also made known to the Greeks the Babylonian weights, measures and money system, if it can be so Through their mediation the Greeks learned much of the astronomy of the Chaldeans, including their knowledge of the ecliptic and the signs of the zodiac. With this went the Babylonian method of measuring circles and their arithmetic. remains of their mines in the Ægean, in Greece, in Spain, even in England, prove that they taught Europe to explore and utilize the treasures of the earth. While they learned the manufacture of glass from the Egyptians and of fine textile work from the Babylonians, they served the cause of civilization by communicating the secrets of these arts to the Greeks. They also made them acquainted with the finest dyes known to antiquity, dyes, perhaps, unsurpassed to this day. There is hardly a land bordering on the Mediterranean that has not afforded proof of the skill of the Tyrians and Sidonians as potters and workers in metal. The decoration of the Phœnician sword handles and sheaths found at Mycenæ are the wonder of modern archæologists. As sculptors, too, and architects they exerted great influence on early Greece. While we know little of their own great buildings, one of the greatest structures of antiquity—a structure pronounced by modern architects a masterpiece of its kind-was their work. We refer to Solomon's temple. When we bring home to our minds how much intelligence was needed and how much knowledge must have been treasured up and made common property among the Tyrians and Sidonians to achieve such results, we will without difficulty reconstruct a rude picture of the activity of the Phœnician schools.

A short journey eastward will take us from the Canaanites of Tyre and Sidon to their neighbors and kinsmen, the Jews. Insignificant numerically, and confined throughout the greater part of its history to the country of the Jordan Valley, this people has affected the destinies of mankind as no other nation has done. Its literature has become the possession of the world, its sacred books, as a part of the Christian Scriptures, the guides of mankind. Its education,

therefore, merits our earnest attention, if for no other reason, because it has had such far-reaching results. But it is also interestting, as we hope to show, because of its unique character, its spirit and its aims.

If we ask when were the foundations of Jewish education laid, the Sacred Books tell us that its beginnings must have been coeval with the establishment of Israel as a nation in the land of promise. Moses, its leader and legislator, was also its historian and the founder of its literature. Instructed in the wisdom of the Egyptians he would have been false to himself and his people, had he failed to provide for the training of men able by their learning to continue the work of God, of which he has been the instrument. If we apply the test we have applied to the Babylonians and the Phœnicians and inquire how far back the art of writing can be traced in Palestine, the answer based on the latest research confirms the testimony of the Bible. True, the oldest monument written in the Hebrew language, that has come to light hitherto, the inscription on the tablet found in the tunnel which conveyed the water of the pool of Siloam into the city of Jerusalem, was engraved centuries after the days of Moses and Josue. It is ascribed by some to King Manasses, by others to Ezechias. But since the discovery of the Tell-el-Amarna correspondence in 1880, we have the proof that even before the return of the Israelites from Egypt their Canaanitish kinsmen, the tribes that in the 15th century ruled Jerusalem and the other cities of Palestine, practised the art of writing. They corresponded with the Pharaoh (Amenhotep IV.) in cuneiform writing, on clay tablets and in the Assyrian tongue. Even as we write we learn from the last volume of "Records of the Past," that Mr. Bliss has made new discoveries at the ancient city of Lachisch only a short distance from Jerusalem, that throw additional light on this question. He found a letter of instructions from the Egyptian government in which occurs the name of Zimrida, one of whose letters to the Pharaoh was found at Tell-el-Amarna. Thus, to use Prof. Sayce's words, the broken halves of a correspondence carried on before the Exodus, that had laid buried more than 4000 years, the one half on the banks of the Nile, the other in Canaan, have been recovered. Sayce hopes that soon the archives of Lachich will be brought to light. all events the finds at Tell-el-Amarna and Lachisch prove conclusively that even before Moses letter writing was practiced in the Holy Land. If we are asked why no Israelitish inscriptions have been found in Palestine we may point, in the first place to Moses' directions, when he ordered copies of the law to be made and set

¹ Records of the Past, New Series, vi., pp. xiii,-xiv,

up: "Thou shalt set up great stones, and shalt plaster them over with plaster, that thou mayest write on them all the words of the law." (Deut xxvii., 2, 3). Inscriptions on a surface of plaster ill resist the ravages of time and weather. In the next place we cannot see why the absence of inscriptions in Palestine proves the non-existence of the art of writing there any more than their absence in Phænicia proves that the Canaanites did not know how to write.

We may, therefore, assume that from its beginnings as a nation, Israel was familiar with the art of writing. What was the script used by the early Hebrews we do not know, though the Tell-el-Amarna and Lachisch discoveries suggest the Assyrian cuneiform. It is certain, however, that they did not use what is now called the Hebrew alphabet. The Siloam inscription mentioned above is in Phoenician characters, i.e., in an alphabet practically the same as the alphabet of the oldest Greek inscriptions. The close alliance of Solomon with Hiram, the Tyrian, and the Moabite stone (900 B.C.), make it all but certain that, already in Solomon's day and probably before, the Jews had adopted the Phœnician alphabet. At all events, the Jews must have had schools almost from their entrance into Palestine. Samuel, Scripture tell us, established prophet schools at Rama, Bethel, Jericho, and Gilgal. Alongside of these there were probably sacerdotal schools. The schools of the prophets, after flourishing for awhile, gradually disappeared. The prophet Amos is the last of the inspired writers that speaks of them.1 The priest schools continued to exist to the Babylonian captivity, for Daniel and his companions, before they were chosen to be taught the learning and tongue of the Chaldeans, had been instructed in the science of their own people. During the dark days of the captivity, the Jewish sages did not forget the learning and wisdom of Moses and the prophets. By the waters of Babylon they cultivated the study of the Thorah or Law, and laid the foundation of the school of doctors that gave rise to the Babylonian Talmud. When Cyrus permitted the Jews to return to the land of Canaan and to rebuild Jerusalem, the man who was most active in shaping the destinies of the reviving city, was Esdras, a man no less distinguished for his learning than for his uprightness and godly life. To Esdras the Talmud ascribes a law enacting that as many schoolmasters as chose should be allowed to settle in any place. While it seems unlikely that such an ordinance was published, amid the trials and difficulties which beset the returned exiles it points to the fact that Esdras was a zealous advocate of education. Just before the rise of the Maccabees (175 B.C.), the wicked high priest Jason established in the holy city a Greek

¹ Döllinger, Judenthum und Heidenthum, p. 801.

gymnasium, which of course did not last very long. From I. Macc. i., 57, and Josephus, we learn that when Antiochus Epiphanes began to persecute the Jews, many private families owned the whole or a part of the Hebrew Bible. When the Maccabees, by their faith and daring, once more raised Israel to a place among the peoples of the earth, they and their advisers did not fail to provide for them the means of obtaining the instruction in the law. which henceforth was regarded by them as the most precious of all goods. Education became more and more organized, and when our Saviour was born every synagogue, we are told, had an elementary school connected with it.1 Later still, and shortly before the destruction of Jerusalem, the high priest Joshua, the son of Gamaliel, in whom our readers will recognize the teacher of St. Paul, ordained that in every province and town schoolmasters (chazans) should be appointed who were to take charge of all the boys of the place after reaching the age of six or seven. Every place counting one hundred and twenty Jewish families was bound to appoint a teacher. Twenty-five boys constituted a class. the number of pupils reached forty, the teacher was bidden to secure an assistant; if they reached fifty, the synagogue must appoint two teachers. Outside of Sparta and the little Greek town of Locri. this is the first instance of general compulsory education. Whether Spartan education can be called education in the sense in which we have used the word, may well be doubted. At all events, we here meet the striking fact, that neither the Athenian Ecclesia nor the Roman Senate nor yet the kings of the East, but the Jewish high priests, were among the first to lay upon their people the obligation to provide education for all their children.

Before entering into the details of Hebrew school education, it is necessary to state that girls were excluded from it. The Rabbis thought its training, which in its essence was legal, unsuited to the female mind. According to Deuteronomy, the father himself is to be the boy's first teacher. From his tenderest age, beginning at the latest with his fourth year, the boy was taught certain texts, which to this day are a part of the believing Jew's daily prayers. On occasion of a great Jewish feast the father told to his family the story of the great events the festival was to commemorate. In this way even before the boy went to school he knew the story of the Exodus, of Esther, of the captivity and the return. At six or seven began the young Hebrew's school-training. To understand this fully, we must bear in mind that several centuries before the birth of our Saviour, the Hebrew had become a dead language; the people spoke Aramæan, a cognate

¹ Edersheim, Sketches of Social Life in the Time of Christ, p. 133.

Semitic tongue, or in the cities, Greek, and under the Roman rule, Latin. But the language taught in the synagogue schools was Hebrew. From the Talmud we learn that there were little parch. ment rolls for children, containing the matter of their first reading lessons. They consisted of the Shema a part of the daily prayers of the Israelite comprising eighteen verses of the Pentateuch (Deut., vi., 4-q; xi., 13-21; Num., xv., 37-41), the Hallel, or song of praise including the 113th to the 118th Psalm, the history of the Creation to that of the Flood, and the first eight chapters of Leviticus. But before taking up this first reader, as we may call it, the child must be taught his letters. The method followed by the chazan was as follows. On a board he drew the letters1 clearly and carefully, announcing the name simultaneously. When the child had thus learned his letters, the teacher took a manuscript, clearly and correctly written, and pointing with his finger or his stylus to a letter, asked its name. Spelling was the next step and then read-The primer has been already described. As the object of all Hebrew education was religious, and to be a good Jew meant to be a rigid observer of the Thorah, or law, the boy's reading lessons, apart from the prayers mentioned, began with Leviticus followed by the rest of the Pentateuch. When he had mastered the five books of Moses, that is to say, when he had learned a great part thereof by heart, he passed to the Prophets, which among the Jewish doctors meant not only the greater and lesser prophets, but all the historical writings from Josue to the four books of the Kings, inclusive. The rest of the Old Testament, collectively called the Hagiographa, was taken up next and completed the pupil's elementary Biblical course. Its analysis will show that it included not only religious instruction and liturgy, but the national history and the ethics of the Sapiential Books, not only prose but poetry, the sublimest poetry ever written. At the age of ten, in conjunction with his scriptural studies the Hebrew scholar took up the Mischnah or second law, which was an exposition of the Thorah. The Mischnah occupied his time till he reached his fifteenth year, when his elementary education was completed. Had the youth shown unusual talent, he now entered the Beth-Hammedrash or academy, where he studied the Talmud, or rather the Ghemara, that part of the Talmud not comprised in the Mischnah. As the Mischnah is a commentary on the Thorah, so the Ghemara is a commentary on the Mischnah. young Hebrew's entire education from the time when his father first taught him the Shema to the day he left the Beth-Hammedrash was one long study of the law and the Prophets.

¹ At the period of which we are now treating, the square Hebrew had already come into use,

the Jew the one important thing to learn was the law. A story from the Talmud illustrates the views of the Rabbis on this point. A young Rabbi, came to his uncle, and asked him, whether having mastered the Thorah he might not now study the wisdom of the Greeks. The uncle referred him to Josue i., 8. "Thou shalt meditate thereon (the law) day and night," bidding him obey this precept first, and then devote the rest of his time to Greek wisdom. How surely and intensely such an education must divide the Jew from the Gentile need not be pointed out; how deeply it must instil into him the ideas, the usages, and the hopes of his fathers is equally evident.

Writing was far less general among the Jews than reading. Still, many passages in Deuteronomy show that even when that book was composed, writing must not have been uncommon. Josue speaks of a book of Jasher and a description of Palestine as existing in his lifetime. Josephus speaks of forgeries, and forgeries presuppose a thorough knowledge of writing. In our Lord's day the writing materials in use among the Jews were the same as those of the Greeks and Romans, viz.: papyrus, parchment and for memoranda, tablets of wax. On papyrus and parchment they wrote with reed quills in black, red, or even golden ink.

As the Jews derived their weights and measures from the Babylonians, they must have learned arithmetic from the same source. Whether it was taught in the synagogue schools seems uncertain. It is true, it was declared to be profanation to make use of one's learning for gain, but that did not always prevent the learned from turning an honest penny by means of their acquirements. So much is certain—if the Jewish boy did not learn to compute in the synagogue school he none the less became a ready reckoner.

The prohibition to make images contained in the Decalogue, according to the interpretation of the Jewish sages, was fatal to the development of the arts of sculpture and painting among their people. Even architecture was in a backward state. Solomon's temple was planned and decorated by Phœnician architects and artists. "In vain," says Babelon, "have many archæologists during the last sixty years made efforts to discover in Palestine, or in the other regions of southern Syria, and even in the heart of Arabia, traces of an art which might have flourished in those regions before the arrival of the Greeks and Romans."

In view of the strong movement developed of late, both here and in Europe, in favor of manual and gymnastic instruction, it is worth while to state that every Jew was obliged to learn a trade or business, and that the rabbis strongly advised parents to teach their children swimming.

¹ Babelon, Manual of Oriental Antiquities, p. 230,

The discipline of the Jewish schools was carefully regulated by the priestly authorities. While corporal punishment was considered necessary, the teacher was warned to be moderate when he had recourse to it. In earlier times, parents were admonished that, to spare the rod was to spoil the child; at the beginning of our era, the chazans of the synagogue schools, were forbidden the use of the rod; instead of it, they applied the strap. Many other wise rules were laid down for the guidance of the teachers, and show that the schools were managed in a kind and sympathetic The men who suggested them did not lack correct insight into child nature. The teacher, for example, was cautioned not to prefer one child to another, and never to discourage a scholar. Patience was to be one of the chazan's fundamental virtues. Should the child not understand his explanations, the instruction was to be repeated in clearer terms, if possible. Beside justice and patience, truthfulness and sincerity were to mark his rule. No threats were to be made, no rewards promised, unless the teacher intended to carry out his threats and promises. Lastly, the morality of the school was to be carefully guarded. Bad company, especially, was sternly denounced and proscribed. Surely, these laws were excellent; and, if faithfully applied in the government of the school, were well fitted to secure a system of discipline both kind and effective.

Two features impress us, on looking back at this sketch of Jewish education. In the first place its spirit was in direct contrast to the ideas that ruled the Egyptian and the Babylonian schools. In the latter, utilitarianism was the alpha and omega of the system. The Jewish schools were built up on one idea—to rear up a chosen people for God, and to divide it from the gentiles. In the second place, it is, indeed, remarkable, that this people when its sceptre had departed from Juda, should have imposed schooling on its children as an obligation.

CHARLES G. HERBERMANN, L.LD.

ON THE OBSCURITY OF FAITH.

AITH, says St. Paul, is the evidence of things that appear not. It has always a certain obscurity belonging to it, and which is a part of its essence. Whence does this obscurity arise? Is it always in the material object of our faith, so that it is impossible to make an act of faith respecting that which is already clearly evident to us on grounds of reason? Or does the obscurity of faith arise from the formal object or motive of our faith, in that the reception of some statement, on the authority of another, in itself throws a sort of mist around the object on which faith is exercised, even though it may be in itself on other grounds evident to our minds? Or, to put the same question in another shape, can we really accept, on the authority of another, that which we know to be true by reason of the evidence that it itself contains of its own truth?

In order to answer this question satisfactorily, we must first of all call to mind the distinction between human and divine faith. In human faith we accept some statement on the authority of man, who may deceive or be deceived. In divine faith we accept it on the authority of God, who can neither deceive nor be deceived. The cases, accordingly, do not stand on the same footing. We will therefore consider them separately. We will begin with human faith. The question before us is whether we can accept, on the authority of others, that which we know to be true quite independently of their authority? Can we put aside the certainty that we have already attained and accept the statement anew, as if our mind was still undetermined? I have before me a mathematical problem that I have just worked out with the greatest care. Each step, from beginning to end, is certain with mathematical certainty. From first to last, I have an absolute certainty of the perfect accuracy of the calculation, so that the conclusion is quite as well established as any one of the axioms from which it starts. further and different mode of working it out would add anything, even to the positive side of the certainty that I have already, as to the correctness of the answer. I now turn to the book from which the problem was taken, and I find that the answer there given is identical with the answer at which I had myself arrived by my own method of proof. Can I now accept the answer simply on the authority of the writer of the book? or does my previous certainty on other grounds preclude me from doing so?

As long as I have before my mind, clear and distinct, the various vol. xvIII.—31

steps of the process of argument by which I arrived at my conclusion, my mind rests perfectly satisfied. I have the highest natural certainty. Any further proof of the conclusion is absolutely superfluous, and if I am asked to believe the correctness of it because of the authority of the compiler of the book, I answer that I am quite willing to do so, but that his authority adds nothing to the strength of my conviction. It offers me a certainty of a lower order, which is of no use to me. The moral certainty that the answer given in the book is correct is only moral certainty, and in the presence of mathematical certainty it is absolutely useless. It adds nothing which is not already found in mathematical certainty. It in no way strengthens the firmness of assent. My acceptance of the conclusion on the ground of my own previous process of argument swallows up the acceptance of it on the ground of the answer in the book, without deriving any advantage from it, just as the kine in Joseph's dream swallowed up their fellows without becoming any the fatter for the addition. If I am to accept the conclusion on this lower ground, I can only do so by prescinding from, and putting away from my mental vision, by mental effort, the more trustworthy ground which has already secured my firm assent to it. But as long as the previous process is in possession of the intellectual field there is no room for the feebler claimant who desires to share it.

But now let us suppose the lapse of a few days or weeks, during which the problem has been entirely absent from my thoughts. When I return to it again my recollection of it has become hazv and indistinct. I do not remember how I arrived at the conclusion, and I am ready to admit the possibility of error in my calculations. With this element of uncertainty as to the various steps that have lead up to the conclusion, there has come in a sort of faint uncertainty as to the conclusion itself, and therefore my mathematical certainty as to the correctness of the conclusion has disappeared also. I am indeed almost sure that I made no mistake. but the whole matter has so faded away from my thoughts that I could not categorically assert it. I could only say that as far as I can recollect my calculations were quite correct. My mathematical certainty has faded away into a strong probability. Perhaps I may not even have any positive doubt as to the accuracy of my solution, but at least I have to admit that the subject has so faded from my memory that it is not absolutely impossible that I may have made some mistake. I am no longer forced to accept it as true on pain of forfeiting my right to be called a rational being, as I had felt was the case at the time that I argued it out.

Now, when once this change has taken place, when once I admit a bare possibility of error on my part, when the truth of the conclusion, and the correctness of the various steps that led up to it, are no longer so luminously present to my mind as to constitute their own irrefragable evidence, when the mathematical certainty has disappeared and given place to a high degree of probability (even though that probability should approximate to moral certainty), then the difficulty of accepting the conclusion, on the ground that it is given in the book, disappears at once. There is no longer present that higher kind of certainty that swallowed up the lower kind. The moral certainty has now a chance of occupying the mental field, as now its only rival is the feebler condition of a strong probability. I can now accept the conclusion on the ground of my confidence in the author of the book. I am morally certain that the answers given by him are correct. I accept his solution on grounds of human faith.

We thus perceive that an element of uncertainty, however slight, is necessary to the practical exercise of human faith. We may, indeed, by an exercise of our will, abstract our minds from our previous acceptance of some statement we have already proved to be certainly true on other grounds; we can think ourselves away from the previous processes and their result. But such a state of mind is an unnatural and unreal one, and in practice we should never trouble ourselves about a proof from the authority of others where we had under our feet the sure ground of mediate or immediate evidence. We can only walk by human faith when we cannot walk by sight. We can, if we choose, carry a farthing rushlight as we walk in the clear light of the noonday sun, but we cannot be said to guide our footsteps thereby until some thick fog, overspreading the sky, hides from us the sun's light. obscurity is a necessary condition to our practical employment of the lamp.

Or to take another illustration which has, perhaps, a more immediate bearing on the question before us. Let us suppose that some eccentric philosopher were to collect together a number of learned authorities who have laid down directly or indirectly, explicitly or implicitly, in their writings that "The whole is greater than the part," and were to ask us to assent to this proposition on their authority, urging that although it is true that this proposition may be proved on other grounds, yet that we shall have a greater confidence in its truth when we hear the wisest of mankind expressing their adherence to it. He does not, indeed, deny its absolute and metaphysical certitude on a priori grounds, but he urges that it is well to have several strings to our bow, and that although there are no steps in certitude, as regards the absence of doubt, yet that it is generally allowed that, on the positive side, it does admit of degrees, and that every fresh motive of acceptance adds to

the firmness of our adhesion. What answer should we make to such a one? We should tell him that the lower kinds of certitude do indeed admit of degree on their positive side, that we can add to the firmness of our adhesion to some fact that we learn from travellers, even after we have arrived at moral certainty as to the correctness of the report, and that, as traveller after traveller bears witness to its truth, we go on adding continually somewhat to the firmness with which we cling to it. But we should remind him that this is not at all the case with those truths that are not learned by experience, but are founded on the very nature of things. These latter truths, as soon as they are grasped, occupy the whole mental field as belonging to them of right, and resent the feeble effort of any lower kind of certitude to effect an entrance. Moral certitude, founded on external testimony, is as superfluous to one whose appetite for certainty is satisfied to the full by metaphysical or mathematical certainty, as is some kind of inferior food to one who is perfectly satisfied with the solid and substantial food which he knows to be exactly adapted to his wants, and which his nature adopts and assimilates as a part of his very nature itself. When we are enjoying the full brightness of the noonday sun, the light of a series of farthing rushlights adds not a whit to the clearness of our vision.

Such is our answer, as regards human faith, to the question whether it is possible for us to accept on the authority of another what we already know to be true from the evidence of our mental sight.

We now turn from human to divine faith. Does the same rule hold good in this case also? Is our acceptance of truths on the ground of Divine faith limited to those which are in themselves obscure, to the exclusion of those which are immediately or mediately evident to human reason? Is it possible that I should make an act of faith in the propositions of Euclid, supposing that God should reveal them to me? Or does the absolute certainty, which already occupies the field of vision exclude any further acceptance on other grounds? Is sight compatible with faith? Is the scientific knowledge of some fact compatible with a belief in it as the object of Divine revelation? This is an important question, and one from which many far-reaching consequences follow.

First of all we must be careful to have clearly before our minds the exact point in question. All Catholic theologians admit that the habit of faith, extending as it does to all the dogmas of faith, can coexist with a scientific knowledge of one or other of these dogmas. When I prove on grounds of natural reason the existence of God, I do not thereby lose my habitual faith in Him. It would be ridiculous to suppose that the infused habit of faith

was diminished in our souls by the clear proof from reason of one or other of the statements of the Nicene Creed, or that henceforth we believed them with a weaker faith, and that we were, therefore, poorer in spiritual gifts. Our faith at least remains as perfect as before. The mere habit of faith induces no obscurity, and the scientific knowledge, involving as it does, a perfect clearness in the scientific act of assent, in no way interferes with it.

In the same way it is universally agreed that an act of faith is, respecting anything, perfectly compatible with habitual scientific knowledge concerning it. When a man makes an act of faith in God, it in no way impairs the strength and certainty of the knowledge of God which he had previously acquired by the use of his reason. A mere habitual knowledge respecting anything does not involve any actual mental operation; and, therefore, cannot interfere with the act of faith respecting it.

The question therefore narrows itself to this: Is an act of faith incompatible with an actual knowledge of the same truth? If I have an actual knowledge, based on reason, of a future life, can I in spite of the certainty of that knowledge, make an act of faith in its reality, accepting it, not as a fact scientifically proved, but as a dogma of faith, revealed to me by the Divine Authority? We have seen that in the case of human faith its exercise is precluded by scientific knowledge. The mental field is already occupied, being determined to an intellectual assent by the evidence of reason, and is incapable of any further determination by the fresh motive of authority. Is the same true when the intervening authority is the authority of God?

It seems at first sight that when we are once so perfectly convinced of any proposition that there is left no sort of room for doubt, the intellectual field is already occupied, and it is impossible to put aside our certainty respecting the truth that has become a part of our mental furniture in order to admit it afresh under a new sanction. Or, to put it in another way, faith always implies a certain obscurity. How then can it be exercised on a proposition which is already evident to our minds, and respecting which there can be no possible obscurity? In confirmation of this view the authority of Holy Scripture is quoted, for St. Paul defines faith as the evidence of things that appear not. How then can we reconcile with his words the theory that faith is the evidence of things that are already evident on grounds of reason? There is no restriction in the words of St. Paul as to the source whence the previous evidence is to be derived, and we must, therefore, suppose that he excludes all previous concurrent proof from reason of truths which we accept on the authority of God. In the same sense Augustine asks: "What is faith?" and answers that it is the believing what

we see not. All evidence, it is further urged by the advocates of this opinion, renders the mind incapable of being influenced by external testimony, as every-day experience bears witness.

All this is true enough, in so far as it is taken to prove that faith excludes the idea of perfect clearness from its object when regarded as an object of faith. The truth in which we believe must be obscure in respect to our motive in believing it. But does it follow that it is obscure under any other aspect? Let us examine the process that actually takes place in our minds.

We have before us some proposition that is as clear to us as the daylight. It may be some mathematical truth, which it is impossible for us to think away from our minds, or some first principle which has a certainty no less absolute. I have not the power to doubt of the proposition before me any more than to doubt of my own existence. This same truth I now find stated in Holy Scripture, or in the dogmatic and infallible decrees of some council of the Church. Can I make an act of faith in it? or am I precluded from doing so by the perfect clearness of the evidence for it, and the consequent certainty with which truth is already presented to my mind?

Now, if faith and reason occupied the same sphere of thought, the evidence afforded by reason would necessarily render impossible the obscurity required by faith. The field of thought already determined by the evidence before it would be incapable of any further determination. The certainty derived from the authority of God would be anticipated by the superior certainty derived from the clearness of actual sight; or, if it were the superior certainty of the two, would dislodge it, and cause it to disappear. The two motives of assent, as motives of one and the same mental process, could not coexist in the same region of thought, since they are different from their very nature, and the difference is one that constitutes a different species of act. Some have, indeed, imagined that the two acts, the act of faith and the act of reason, could be combined in one and the same act. But what sort of an act would this be? It could not be a merely natural act, since it partakes of the nature of faith. It could not be a purely supernatural act, since it is partly based on reason. It could not be partly natural and partly supernatural, for in that case it would combine the perfections of the two acts that are supposed to be united it it. would have the supernaturality of the act of faith and the clearness of the act of natural reason. There would thus be present to it a kind of supernatural self-evidence, which would be quite incompatible with the obscurity of faith. Moreover, this double act would be at the same time a free and a necessary act; free by reason of the freedom that is the result of the obscurity of faith, and necessary

on account of its being a proposition the truth of which is self-evident.

But the impossibility of combining an act of faith and an act of reason in one and the same mental act does not prevent us from making an act of faith respecting some proposition which is already evident to us on grounds of reason. For the two acts are not only different acts, but they do not belong to the same order. They cannot interfere with each other, or come into collision, for the very simple reason that they do not claim possession of the same field. You might as well expect a collision between a railway train running along the ground, and a balloon that is floating in the air. The act of reason is in the natural, and the act of faith in the supernatural order, and therefore they can coexist, not exactly side by side, but one above the other,—the act of faith on the higher, and the act of reason on the lower level. The one does not swallow up the other, and the one does not support the other, as the act of faith is in a sphere altogether removed above the sphere of reason. Yet, we may say that the one and the other act, alike, support the proposition which is the subject-matter of both of them. The act of faith by which we assent to it on God's authority is its support in the supernatural order of faith, and the act of reason by which we assent to it on account of its being evidently true in itself is its support in the natural order. If we should find out that some proposition that we have believed to be divinely revealed, as well as naturally evident, does not after all form a part of God's revelation, we have still the natural evidence to fall back upon; and if on the other hand such a proposition which we had regarded as naturally evident proves, after all, to be certain only with a lower degree of certainty, this does not derogate from our firmness of assent to the act of supernatural faith by which we assent to it on the divine authority.

It is not difficult, now that we have thus cleared the ground, to see what kind of obscurity is required in divine faith. In human faith the material object of our faith must be in itself in some way obscure, because if the proposition we are asked to accept is evident to us, or indeed is certain with any kind of true certainty, our mental field is already occupied, and the new motive for assent can find no room for admission, and is a superfluous and unnecessary addition to the grounds for assent which are already in posession. For human authority can never give us a certainty at all to be compared with the certainty that is the result of demonstration and evidence. It can give at most only moral certainty, instead of the metaphysical certainty which comes of deductive arguments from general principles, or which is inherent in those principles themselves. The only addition that human authority can make to

previous certainty is that it can, in the case of moral certainty, add a fresh support to the structure which can already stand on the support by which it is already borne up. But where the certainty is one of a higher kind, it is absolutely futile to recur for a moment to the illustration that I have given above: it is clear that so long as I am absolutely sure that I have worked out the problem with perfect accuracy. I acquire no further certainty from the fact that the same solution is given in the book. It is not until there enters into my mind at least some faint doubt as to my own perfect accuracy throughout, and I am inclined to think that it is just possible that I may have made a mistake somewhere, that I can rest in any way on the authority of the book, or accept it because it is so laid down in its pages. It is not until my recollection of my process of proof becomes hazy and indistinct, and my confidence in the accuracy of my result to some extent shaken, that I am able to accept the result no longer on the strength of my own calculations, but because of my confidence in the accuracy of the author of the book, and in the consequent accuracy of the answers there set down. The absolute and unhesitating certainty which was based on my own working out of the problem must have retired from the field before its feebler rival can take possession of it. They cannot both be at the same time the primary and determining motive of my assent.

But the case of divine faith rests on an entirely different footing. Whence arises the obscurity in the act of faith? Simply from this, that the assent of faith is based on the divine testimony, and all testimony is in itself something not evident and obscure. Everything that comes to us second-hand is necessarily less clear than that to which our mental powers attain directly. We receive it hidden from us by a veil, and this veil consists in the testimony of him who communicates it to us. The thickness of the veil, and of the consequent obscurity, depends partly on the knowledge that we possess of him who is the source of the communication and partly on the means that he employs to impart it. Now, in the case of the knowledge that we have by divine faith, the source of our information is One whom no man hath seen or can see, Who dwells in the inaccessible light of His divine majesty, and is known to us as long as we inhabit mortal bodies, only through a glass after a dark manner. If He who speaks is thus hidden from us, it must needs be that there hangs around His utterances an obscurity that will continue until we shall see Him face to face, and know as we are known. To this first ground of obscurity in the assent of faith another is added. Not only do they proceed from One who is hidden from our sight, but the manner in which He imparts them to us is in itself obscure. They come to us in general through some human agency. God does not talk with us as he did with Abraham-as a man talketh with his friend. He has certain established and authoritative media of communication, and before we can accept some proposition as one of faith, we have to be sure of the authority of the medium. We have proposed to us some doctrine, and are invited to make an act of faith in it, but we have to go through the preliminary process of ascertaining whether it is one that God has really revealed to us through His Church, or by some other channel through which we already know that He is wont to speak. And, when we have ascertained the fact, there results a further obscurity imparted to the communication made from the channel through which it is made. Utterances reaching us through such a channel come to us not second-hand, but third-hand. However trustworthy the medium, however certain we are that God has spoken, and that His words are placed before us as He spoke them, yet the fact that they are reported to us through another's agency increases the obscurity, even while it in no way interferes with our perfect confidence in their divine truth. Hence, when God reveals any truth to us to be believed on His authority, He thereby invests it with a circumambient mist, as far as regards our supernatural acceptance of it. We are free to take it or reject it, and if we reject it and disallow the binding force of the authority of Him who vouches for it, we cannot be charged with violating thereby our rational nature, or forfeiting our claim to be regarded as reasonable men. It is true that in its final consequences any adherence to error is at variance with our rational nature, but in rejecting the divine authority on some detailed proposition we cannot be regarded as directly and immediately sinning against the light of reason. The formal motive of faith is in itself obscure, and it creates of itself its own obscurity, and does not require it as a previous condition in the material object. Human faith presupposes obscurity in its material object, and without it is incapable of energizing; whereas, divine faith supplies the obscurity from its own nature, and is quite indifferent to the previous character of its material object as regards its evidence or obscurity, so long as it can claim for it a true moral certainty on grounds of reason.

When St. Paul says that faith is the evidence or proof of things that appear not, he means that faith itself, in virtue of its inherent obscurity, causes those things which were evident as objects of human reason to become obscure as the objects of divine faith. So far from its following, from the fact of their supernatural inevidentness that they cannot be evident naturally, there is no single truth of divine revelation about which we may not make an act of faith, however clear and unmistakable may be its evidentness in the

natural order. Or, again, St. Paul may be explained as meaning that faith is the evidence or proof of a number of truths that are not evident on grounds of natural reason, and that it thus makes known to us mysteries altogether beyond the grasp of unassisted nature, and claims our undoubting assent to propositions respecting which we otherwise could never attain to any well-founded certitude.

In the same way, when St. Augustine says that faith consists in believing what we do not see, we may explain his words as meaning that it consists in believing that which is not evident to us in the supernatural order, or that he lays this down as the test of faith that it is ready to believe not only things that are clear to us on other grounds, but also those that are obscure, so that we could not attain to any certainty regarding them on grounds of natural reason apart from divine revelation.

To sum up: We can make an act of faith not only respecting things over which there hangs some sort of obscurity in the natural order, so that apart from Revelation we should be at fault to know whether they are true or not, but also respecting things perfectly clear and evident, so that there can be no doubt whatever of their truth, quite apart from all revelation whatever. The reason of this is that faith and reason occupy different spheres, and that a proposition may be as evident as the day in the lower, or the order of reason, and at the same time may be obscure and vailed in the higher region of supernatural faith. The obscurity of faith does not mean that its object must be obscure before faith comes to shed its light upon it, but that that very light is, from its very nature, a light which carries with it an obscurity of its own in its own order. We may with our natural eyes be able to discern clearly certain objects around us. There may be no sort of dimness or obscurity about them. But now a glass is put into our hand through which we are asked to survey the scene. The glass carries with it a certain dimness, affecting all things seen through it. But when we employ it we are able to discern a number of objects that before we saw not at all, and in the objects that were previously within the range of our unassisted vision we are now able (spite of the dimness that it carries with it) to perceive much that we did not observe in them previously. So great is the change that we are able to say with truth, "Whereas I was blind, now I see," and though there is a dimness round this new sight, yet it is a dimness which gives us quite a superior sort of knowledge compared with the clearest vision that we enjoyed before. Our knowledge of objects that our eyes distinctly saw is in no way an anticipation of our present and far deeper insight into them. The one does not hinder the other, or render it nugatory. Our higher method of regarding all things around us does not in any way depend on that lower method which consists in an unassisted vision. When we use the glass which has been put in our hand from above, it makes no difference whether the objects it manifests to us were clearly known before, or were wrapped in a previous obscurity, since it carries with it its own authority, as the obscurity that accompanies it is compatible with a perfect clearness in the objects seen when perceived by the natural sight, since it is an obscurity that arises from the very nature of the instrument, and not from any characteristic pertaining to those objects in themselves.

But there is still another question to be answered, and one which will aid us not a little to the clear understanding of the matter under discussion. If faith is compatible with that which is evident in the natural order, is it similarly compatible with the clearness of supernatural evidentness? If God reveals to us some truth in such a way that we have an actual vision of it in the supernatural order can we any longer make an act of faith respecting it? When St. John the Evangelist saw in an ecstacy the heavenly Jerusalem, and knew that it was God who was showing him the sights and causing him to hear the sounds of the city of God, was it possible for him any longer to exercise the virtue of faith as regards the scene of which an intellectual vision had been vouchsafed him? When our Lord revealed to St. Bridget the details of His Sacred Passion, so that she saw them before her as clearly as if she herself had been present on Calvary, was an act of faith still possible to her, or had faith already passed into sight? Such visions as these, in which God reveals to His Saints what is hidden from the world in general, carry with them their own supernatural evidence, and consequently supernatural certitude respecting them. We should therefore expect them to be at least as certain as the knowledge of faith. Faith, therefore, becomes superfluous on the principles already laid down. The supernatural field of the human intellect is occupied by a supernatural certitude, and there is no further room for the certitude of It is not as in the former case, where the certitude resulting from the evidence of reason was a natural certitude, belonging to a different region from the supernatural region of faith; for here both kinds of certitude claim a place in the same supernatural region, and as evidence is a stronger motive for assent than any other method of proof in one and the same order, it would follow that the firmness of adherence by reason of the revelation by sight would be greater than the firmness of adherence by reason of the dim and obscure revelation which is apprehended by faith, and when once the former was in possession there would be no

room left for the latter. At least one or other of the two acts would be superfluous. Faith would add no further certainty, and it seems, therefore, unlikely that God would move to an act of faith one who had already received some divine truth by an act of intellectual sight. Yet this collision between the two acts, and the incompatibility of the two motives of assent, would only last as long as the actual vision was clearly present to the intellect. When once it had to some extent faded away, or become dim and indistinct, faith would once more resume its activity. The habit of faith had always been there, and the act of faith had always been there, at least virtually, and it had simply been for a time restrained from energizing on account of the presence of the actual vision, which occupied the field of thought.

From this we pass naturally to another question, viz., whether faith is compatible with the beatific vision. Here there is no room for any sort of doubt so long as we are speaking of the act of faith. Faith is the evidence of things which appear not, and, therefore, when the object of our apprehension appears before us in the perfect brightness and clearness of the vision of God, faith is not only superfluous, but impossible. Hence, St. Paul contrasts our present knowledge by the light of faith with our future knowledge, when we are in the immediate presence of God. "We see now through a glass in a dark manner, but then face to face. Now I know in part, but then I shall know even as I am known. When that which is perfect is come, then that which is in part shall be done away."—I Cor., xiii., 10, 12. This is the real meaning of St. Augustine's words quoted above. The contrast that he, and indeed all the Fathers of the Church, draw between faith and sight is not between the supernatural act of divine faith and the natural act of intellectual vision, but between the obscurity of faith in this world and the perfect clearness of the supernatural vision in the world to come.

But though it is impossible for one who has the beatific vision present to his sight to make an act of faith, it is quite possible that the habit or light of faith may still remain, even though precluded from passing into act by the superior certainty derived from sight. When St. Paul was rapt into the third heaven and beheld (as St. Thomas teaches us, 2, 2, 175, 3, Q. de Ver., art. 2) the very divine essence, he hid not hereby lose the habit of faith. In the saints in heaven there may remain that supernatural light that we call the habit of faith, although there is now no room for its exercise. It is swallowed up in the superior brightness of the beatific vision. But if we could imagine (supposing it were possible) the suspension for a time, in the case of one of the saints in heaven,

of the actual vision of God, there is no reason why he should not in that case make an act of faith by reason of the habit of faith, which would then find the field of thought in the supernatural order no longer occupied.

We cannot conclude this paper without saying a word as to whether the virtue of faith were possible to our Blessed Lord while He was on earth. If the habit of faith is not necessarily excluded from the blessed in heaven, in whom there is no kind of imperfection, it might seem that much more could it be present in our Lord; during the time that He was clothed with all human imperfections, with the sole exception of sin and all that appertains to sin. question is not whether the act of faith was possible to our Lord; for it is clear that as He was ever in possession of the beatific vision, and His sacred humanity ever gazed on the divine essence by reason of the intimate union with His divine nature, any exercise of faith was precluded by the clearness of perfect sight. But was the habit or light of faith dwelling within Him, and was it compatible with His divinity? To this we answer with all theologians that it most certainly was impossible that even habitual faith should be present in the Son of God. For faith implies the capacity to accept, on extrinsic authority, some truth revealed to us by another. There is no contradiction in supposing such acceptance in one of the blessed in heaven, but here is an absolute contradiction in making the same supposition in the case of our Lord. He, from the first moment of His conception in the womb of the Blessed Virgin Mary, had ever present to Him, by reason of the hypostatic union, the divine essence. The extrinsic authority required by faith could not be present in Him in whom there dwelt all the fulness of the Godhead. There could not be in his case the obscurity which is of the essence of faith. We must, therefore, believe that neither in act nor in habit was the virtue of faith possible to the Son of God.

At the same time, whatever of perfection is to be found in faith was of necessity to be found in His human nature. In faith two acts concur, and in the habit of faith two different habits are combined. The one is in the intellect, the other in the will. The one is an infused intellectual disposition, and is the principle which elicits the assent of faith. The other is supernatural disposition of the will, which elicits the necessary loyalty and readiness to believe. Now, the assent of faith was absolutely impossible in our Lord, and consequently the actual and efficacious will which moves the intellect to believe was also impossible. But it is quite a different case with that disposition of the will that renders him in whom it is found full of that loyal obedience, that is ready to accept on God's

authority whatever He may reveal, if so be its possessor is placed in a condition where such an obedience of faith should be possible to him. In such a disposition no imperfection is implied, since it merely disposes the will to be ready to carry out any work imposed upon it, even though the particular work in question is one that it will never have to perform. In this sense the virtue of mercy was present in our first parents in the Garden of Eden, though they had no possible object on whom they could have mercy. In this sense we may say that our Lord had the virtue of faith in that in His human will was present everything that is required for the obedience or the merit of faith. "Whatever perfection," says St. Thomas (Pars 38, Q. 7, art. G.), "is to be found in human faith and hope exists much more perfectly in Christ, but the defects which are implied in faith and hope are necessarily absent in Him."

R. F. CLARKE, S. J.

COMMON-SENSE OBJECTIONS TO THE POSTULATES AND CONCLUSIONS OF EXTREME EVOLUTIONISTS.

THE theory of evolution has had a marked effect upon the current of the world's thought. It has in no small degree diverted science from its true mission of discovering the unknown laws of nature, by occupying its time with a labored attempt to verify a foregone conclusion that one supreme law of development reigns throughout both the mental and the material world; it has turned in a new direction the search for the true basis of morality; and it has produced in many minds a vague impression that it has somehow undermined the foundations of revealed religion. It has met, too, with a surprisingly ready reception. Many seem to have been quite willing for it to sweep them away from their old moorings, without so much as once asking how much of actual undisputed fact is claimed as the ground for this change in the world's way of thinking.

If they had put this question to themselves, they would have been surprised perhaps at the answer. For it is that the startingpoint of the attempt to explain man's origin, development, and destiny upon the theory of evolution is not a proved fact at all, but the yet unproved hypothesis that some species of living beings have been developed from other species. It is true that the idea of such a development was first suggested, and has since been made apparently more plausible, by the observation and study of admitted facts. But still it has never passed from the domain of theory into that of undisputed truth. The too willing converts to extreme views on the subject of evolution have not waited for it to do so. They have hastened to proclaim the hypothesis of such a probable development to be the most fruitful of all scientific thoughts, and have proceeded at once to build upon it an inverted pyramid of the most extravagant proportions. They declare it to be the only sure clue to the past history, the true meaning, and the future destiny of the universe, including man and all his worksmaterial, mental, and moral.

Now, if this probability were regarded merely as a matter for discussion among scientists, we should not have a word to say of it. But when those who take such extreme views of its importance ask us to accept their initial assumption as an indubitable truth before it is shown to be such; when their assertion that it puts revelation in irreconcilable conflict with science, is appealed to in

justification of the crude thinking and shallow talk now so common on that subject; when they are industriously teaching a false and most pernicious theory of morals as one of the doctrines of evolution, under the pretext that it is a branch of "popular science"; when they go thus far, it is time to examine the claims they make for their one all-important probability. By all means let it have whatever scientific value they may justly claim for it. But when it is made the basis of a theory that disposes of us bodily, mentally, and spiritually, both now and hereafter, it becomes to each of us a personal matter, and it is our right and our duty to question this unlimited extension of its reach.

This is all we propose to do. Therefore we wish it to be understood that when we speak of the evolutionist we mean the extremist, who would make his theory account for everything that is knowable of the past history and the present order of the universe, from the first movement among the particles of mist in the primeval chaos down to the latest product, intellectual or moral, of modern civilization. We shall aim to show that in attempting to do so he is compelled to make assumptions that are obviously contradictory, that require unquestioning submission to the dogmatism of science, and that for the hitherto generally accepted explanation of the mysteries connected with the origin and present order of the universe, substitute in the most arbitrary manner other explanations which make those mysteries even still more profound and unfathomable. We shall present none but the simplest considerations, such as can be readily understood by those who have no special knowledge of science. For we write for that class of readers: and our object is to show them that if in any quarter faith in the Christian genesis has been shaken by the new theory, it is because the advocates of the latter have not been as candid in admitting the weakness of its foundations as they have been industrious in making known the extreme consequences they deduce from it.

In pointing out the assumptions we have just referred to we may conveniently divide the work of evolution into two epochs. The first extends from "the beginning" to the time when higher forms of sentient life, endowed with consciousness, with more or less of intelligence, and with the faculty of will, are said to have at length been developed from lower forms that were not thus endowed. The second extends from this point in the progress of evolution down to the present time.

Now as to the first, it must be admitted that any attempt, no matter upon what principles, to account for the origin of man or of the universe, must always take us back to a region of inscrutable mysteries. The Christian explanation of these mysteries begins by affirming that the material world was created out of

nothing by an omnipotent personal Intelligence, and that in creating man the same Intelligence joined together a material and an immaterial substance—a body and a soul. This explanation accords with what is called the spiritualistic philosophy, of which we need state only a single postulate. It is that the psychical element in man's dual nature is a separate spiritual entity, endowed with certain faculties of its own, such, for instance, as the faculties of loving and of willing. It exercises its faculties spontaneously, in explanation of which term it will suffice here to say that it is not determined to activity solely by the influence of outside causes. Its operations are not the product of anything material in its environment, nor is their quality or character determined altogether by the influence of that environment. Sensible things do not impose upon the mind its way of thinking; on the contrary, it has its own innate way of thinking, which sensible things can neither change nor wholly control. Neither the intellect nor the will of man is a mere irresponsible creature of circumstances helpless and passive under the moulding influence of heredity and environment.

But this explanation and this philosophy are rejected by both the schools, the more and the less materialistic, into which extremists may be divided. To the former belong those evolutionists who hold that there is nothing in the universe but matter and force, and who attribute all the works of nature to these two factors alone. They deny the existence of any such thing as immaterial substance, and trace every phenomenon in the world of mind back to a source in the world of matter. They repudiate the Christian genesis as unscientific, upon the ground that it first postulates the existence and action of a Being who is not discoverable by any process known to science, and then assumes farther that He has united to the body of man an immaterial substance, of which again there is no trace that science can detect. Even admitting that such a Being may have been the first cause of all things, and that He may have appointed for every living thing a particular final destiny which its environment fits it to attain, still science cannot admit these possible designs on His part as an element in any of its investigations. For it has long since discarded the doctrine of "final causes." In investigating scientifically the cause of the beginning of things, we must lay aside all ideas about God, except the idea that He may have been the unknowable cause of atoms and force. Granting that He did cause them, we may dismiss Him entirely from our thoughts after we have once gotten them. The idea that He ever exercises any providential control over, or any personal oversight of, the action of force upon atoms, may be a pious belief, but in the view of science it is a useless and an inadmissible hypothesis.

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The other school adopts a form of materialism which, though apparently not so gross, is nevertheless, to all intents and purposes, as real as the one we have just mentioned. It puts just as great an obstacle, as we shall see, in the way of making the evolution theory account for the development of intellectual powers and moral perceptions as well as of physical organisms. Its advocates admit that there is something more in the universe than matter and force, because they meet with certain phenomena for which these factors alone cannot account. While Mr. Fiske asserts that we no more know whence comes the soul than we know whence came the universe, yet he affirms that "by no possibility can thought and feeling be the product of matter." So, too, Mr. Huxley believes that beside matter and force "there is a third thing in the universe, towit, consciousness, which is neither matter nor force, nor any conceivable modification of either." The manifestations of this third thing, which are called psychical phenomena, are so interwoven with the phenomena of matter that evolutionists are compelled to bestow upon them a large share of their attention. They believe, in fact, that at some period in the process of development "there came, like a thief in the night, a wonderful moment when psychical became of more use than physical changes to man's brute ancestors." But inasmuch as on the psychical side of conscious living beings we never see anything but mental or spiritual phenomena, they hold that if these be abstracted there is, as far as we can ever know, nothing whatever left. What is called spiritual substance is in their view a mere metaphysical abstraction, and it is impossible ever to find out whether there is any real entity corresponding with it. And even if there be, it must forever remain an unprovable hypothesis that it has the gift of spontaneity, that is, of action by virtue of innate powers of its own, independently of anything in its inseparable companion, the body.

But this professed agnosticism is at bottom only materialism in disguise. For while it asserts that it neither affirms nor denies the existence of such a thing as spiritual substance, it does virtually deny it by undertaking to explain the work of evolution without reference to the question of its real nature and properties. Even if its existence were an admitted fact, the evolutionist's method of reasoning would so exaggerate its dependence upon its material environment as to make the latter everything and itself nothing. Has it such innate powers of self-direction as to make its development not wholly dependent upon that of the physical organism with which it is associated? Had the different elements in the complex being of each of our brute ancestors such a reciprocal influence upon each other as to make his survival of his less fortunate fellows, who perished in the struggle for existence, depend

as much upon his superiority to them in his brutish mind as upon his superiority in bodily strength? Did inborn cunning and sagacity in using his strength have as much to do as the strength itself in putting him ahead of his fellows in the race for manhood? Even the less materialistic evolutionists object to such questions on the ground that they relate to a matter about which we can never have any positive knowledge. Since it is impossible ever to see the mind of either ape or man at work as it is in itself, and apart from material surroundings which influence its action, the true position of science as to its nature and faculties is avowed agnosticism.

Starting back with these materialistic principles, the extremists tell us that at every step in the past the organisms of which life is either the product, or now at least the accompaniment, were less and less complex, until we arrive at last at a point in the distant past at which there was nowhere in the universe any organized structure, and consequently nowhere any life at all. This was for us the "beginning." All that lay back of this must remain forever unknown, and all speculation about it is unscientific and unprofitable. We may, if we choose, cherish the belief that God created out of nothing the primordial mist out of which all things have since been evolved. About that matter science has nothing to say, because it implies a mystery, and mysteries are things that she does not deal in. So far as she is concerned, we have arrived at the limit of possible human knowledge of the past. And there we find nothing but non-luminous nebulous matter. It extended away in every direction so as to fill the universe, leaving no room for any conscious life, or spirit, or will. If it had been created by God, it had shut him out so completely from the space it occupied that science has never been able to detect the slightest trace of His connection with it in any way whatever. There was nothing anywhere but lifeless atoms of matter, ready when the time for it came to be acted upon by force.

Now while the extreme evolutionist professes to be able, without the aid of Revelation, to bring the light of true knowledge out of this primeval chaos, we can easily see that he never for one moment gets out of the darkness of its mist. He is compelled to go into the domain of what he calls the "unknowable," and when he returns, he brings with him mysteries and contradictions that hang over and darken, even to the end, everything he tries to explain.

In the first place, it is a contradiction in the outset for him to assume the existence and operation of the two factors, atoms and force. For it is a first principle with him that in explaining those visible phenomena, which alone are the proper subject-matter of science, one must not go into the domain of the invisible and intangible to find the efficient cause of those phenomena. That is the very reason why it is asserted that God, and all such impalpable things as the mind and soul, as entities distinct from matter, should not be allowed to enter as factors into any problem to be solved by science. But is the existence and action of God, or of spiritual as distinguished from material substance, any greater mysterv than the mystery connected with the atoms whose separate individual existence is assumed? No one has ever separated one of them from its fellows so as to see, or weigh, or measure it. No one has any real knowledge of them. Huxley frankly admits that he cannot conceive how such a thing as an atom can exist. It is not even certain that they have ever had any existence at all. except in a theory devised to account for the phenomena of matter. Thus evolutionists banish from the domain of science all immaterial substances, because they are invisible, intangible, impalpable, while at the same time they demand that their theory shall be allowed to commence with a whole universe of atoms that can no more be seen or touched or accounted for than a soul can be. This is an inauspicious beginning for a theory which is designed to show us how to reason consistently. But we shall find that we cannot follow the extremist without allowing him to be as arbitrary as he pleases, and without "leaping blindfolded at his bidding across many dark chasms in our way."

This is just as clearly illustrated in the case of his other factor, force. Here again Huxley confesses that he can no more conceive how force acts than how atoms can exist. We know nothing whatever of its origin, or of its nature, nor can we say positively that it has any existence at all, apart from the presence and action of a living intelligence and will to put it and to keep it in operation. It belongs, if anything does, to the domain of "unknowable" things. It is just as impossible to see or touch or weigh it as it is to perform these operations upon a soul. true that we speak of feeling or of measuring a force. But what we really feel is that which the force puts in motion. The force is something that is assumed to account for the motion, just as in the spiritualistic philosophy spiritual phenomena are accounted for by predicating the existence of the soul. Here again evolution goes beyond what is seen and known in search of an invisible cause for it, and it thus does the very thing that its advocates condemn in those who find in the will of God the cause of all things. They assert that the idea of His present personal connection with the universe is a mere figment of an unreasoning faith; and yet, for all we know, force may be a mere figment of "the scientific imagination," and it may be just as true that bodies move because God wills that they should as it is that our limbs move at the bidding of our wills. The choice of an invisible mysterious impersonal force, to take the place of a personal God in the control of the universe, seems to be wholly arbitrary. It certainly cannot be justified by the plea that it enables us to deal only with that which is visible and tangible, and therefore readily understood. It cannot be claimed for it that it has the advantage over the Christian genesis of involving nothing that goes too far beyond the limit of human vision to be fully comprehended and clearly explained.

The next step in explaining the work of evolution betrays again a disregard for consistency. The advocates of the theory assert, as we have said, that all speculation as to what existed or occurred before the process of evolution began is useless. Yet they no sooner get the two factors they ask for than they begin to speculate about the state of things prior to the time when these two factors began to evolve the present order of the universe. This, however, could not be very well avoided. For the commencement of the work of evolution required very peculiar conditions. It could never have begun at all, except upon the assumption that in "the beginning" the atoms were in such a relative position, and the force in such a passive state of inaction as they have never been known to be in since. As far as we know, the force of attraction between the particles of matter has always been in operation; and consequently the tendency of the atoms has always been to come together and form the earth and the heavenly bodies, as the first step in the process of evolution. But this would not suit the purposes of the evolutionist at all. For it would throw the beginning so far back into the eternity of the past that even Darwinism would have a perplexing surplus of time on its hands. Instead of being incomplete, as it still is, the work of evolution would have been finished, the perfect man would have been developed and disappeared, and the end of all earthly things would have come millions of ages ago.

The evolutionist gets over this difficulty by assuming that before the present order of things began to be evolved out of chaos, the law of gravitation was suspended; or rather, had never begun to operate, and that the atoms which, according to all scientific observation and experience, have always tended to come together, then stood apart, so as to form a mist instead of the solid earth and its contents as we now see them. But, apart from the objection that this is speculating about the unknowable, such an assumption is wholly incompatible with another which he is compelled to make. For, in order to account for the action of that force of attraction by which atoms of matter cohere together, it is assumed that this force is "inherent" in them. But what does that mean? Only that the

property of coming and remaining together so inheres in, or sticks to atoms of matter that they never have been found without it. But if so, is it not a contradiction to say that at first, notwithstanding this quality so inseparable from them, they were scattered about in a mist, instead of being gathered together into organic and inorganic structures as they have been ever since? To this question, as well as to the inquiry how long, by what power, and for what reason they had been held apart, the evolutionist makes no answer. All that he has to say is that his theory will not work at all, unless he is allowed to put the atoms just where it requires them to be, even if in placing them he has to violate his own first principles by speculating about the unknowable, and to violate the known laws of nature as well.

But this is not the only extraordinary privilege that the theory of evolution demands. It also asks to be excused from answering a crucial question, which decides at once whether it makes good its claim to give a rational explanation of the way in which the course of events in the world's history began. That question is this: If, as is assumed, the forces of nature were before the "beginning" held back for a time from their proper action, how did they ever come into play at all? The evolutionist's only answer is, I do not know. Of the only two possible replies his own principles forbid him to give one, and he will not insult our intelligence by giving the other. Force first began its action among the atoms of matter either by the fiat of Almighty God, or by chance. But he cannot accept the former alternative, for he insists upon beginning with nothing but a blind force and a material mist. He puts away from him, as being wholly inadmissible in a scientific investigation, the idea of any living intelligence to conceive, or of any conscious will to execute a plan in regard to the movement of the particles of the mist. Of course, then, nothing could ever have happened among them except by chance. The only account he can give of the commencement of the process of evolution is that the atoms just happened to begin to exercise their inherent power of attracting each other. Without a hand to touch it, the curtain arose mysteriously, and the drama of the world's undesigned history simply began of itself.

But chance did not perform its only office in the scheme of evolution in thus first setting in motion the course of events. Ever since the beginning it has been constantly at work producing the most astonishing and naturally incredible results. For although when arranged in the form of a mist, the atoms were mere dead matter, and began their movements by chance only, yet they no sooner commenced to move than they showed something very much like a will of their own. They have their affinities and their

antipathies, very much as men have their likes and dislikes. In moving to and fro in the universe, atoms of hydrogen, for instance, may meet other atoms for which they have no "chemical affinity" millions of times, but will pass them by as strangers with whom they have nothing to do. But when a certain number of atoms of hydrogen meet a certain number of atoms of oxygen they unite and form water. In the same way, oxygen and hydrogen, when they meet carbon and nitrogen under certain conditions, unite with them to form living tissue. And so it is with atoms of all kinds. They seem to have definite rules of conduct to which they always adhere. If men acted thus, we should be absolutely sure that they had submitted themselves to some will, which had imposed upon them laws which they had consented to obey. But the evolutionist excludes from his view any such thing as a divine will that might account for this conduct of the atoms of matter, and he does not attribute to them any will of their own. Of course, then, they must have been guided wholly by chance, not only in the incipient stages of evolution, but in entering into all the combinations they have formed down to the present day. And thus we have the perpetual mystery and contradiction of chance acting by uniform laws, and evolving out of the primeval chaos the continued order and harmony of the universe. The only escape from this conclusion is by returning to what the evolutionist would call the exploded doctrine of final causes, and of a continual providence of God over all things.

But let us come now to the second stage of evolution, in which we have to consider the work of atoms and force when the former are aggregated in the form of sentient and conscious beings. In this stage the famous "struggle for existence" takes a new form by becoming a conscious struggle, and in order to give a rational account of its motive, its originating cause, and its final outcome, it is necessary to take into consideration certain participants in it of which we have so far said but little.

These participants contribute nothing to "the survival of the fittest" in the case of inanimate purposeless things. A favorable environment secured by non-sentient organisms, seemingly by accident, might be considered perhaps as accounting for the survival of the most fortunate of them. A plant, for instance, might survive and be developed by reason of advantages of situation, with the securing of which it certainly had nothing to do. But in each particular case of animal life, in which the struggle for life is conscious, and has a motive, and is knowingly directed towards the prolongation of life as a definite end, we obviously have a different problem presented to us. For intelligence and persistent will in pursuing an object are here manifestly present. It is equally

manifest also that they take such a controlling part in directing the struggle in each case, and in the decision of its results, as to make them the most important factors in it. And unless they are to be considered the product of matter and force, we cannot make the action of matter and force upon them the sole true measure of their influence upon the processes and the outcome of evolution. We are compelled to ask such questions as these: Is there not present something to be taken into account, call it immaterial or spiritual substance, or what you will, which is not bound by the laws of matter, but has a power of its own of independent spontaneous action? Is the matter of the physical organism with which it is associated merely the instrument with which it puts its purposes into effect? Or is the physical organism its prison house, which allows its powers room for action and development only as it is itself more or less improved by development?

Evolutionists answer this last question in the affirmative. Mr. Frederick Harrison is fully convinced that the faculties of mind, feeling, will are so directly dependent upon a physical organism, that he considers it sheer nonsense to talk of such faculties in the absence of physical organs. Huxley is unable to conceive how such a thing as immaterial substance, or "spirit" can exist. And even granting its existence, its manifestations, he thinks, are so dependent upon certain molecular changes in a material body, that the hypothesis of a spontaneous exercise of its faculties, if it has any, is a wholly unprovable assumption. Evolutionists of his school therefore "banish from all regions of human thought what are called spirit and spontaneity." Concerning the nature and laws of that which lies on the psychical side of the boundary line between the material and the mental world, they profess that they know nothing, except that it is dependent for the manifestation of its phenomena upon something material. Is there on that side a substance which underlies mental phenomena, as there is on the other a material substance underlying physical phenomena? Has it the power, in any way, to modify or limit such influence as, from their inseparable association in this life, material substance would seem to have over its acts? To such questions their answer is, our business is with phenomena, and not with the philosophy of the substance and innate powers of mind. We hold that nothing true can be learned of the origin and development of intellectual powers and moral perceptions, except by turning away from all speculation about the invisible and intangible, and confining ourselves to the visible phenomena which invariably accompany the manifestations of intellectual and moral faculties.

Now the truth or falsity of this initial agnostic postulate determines the truth or falsity of the evolutionist's conclusions con-

cerning the origin and development of man's physical, mental, and moral being. For the whole chain of his reasoning hangs by this postulate; and if it can be shown to be a mere painted hook upon the wall, then every link in the chain must fall to the ground. Let us see then whether its strength is real, or only fancied. In other words, let us endeavor to answer this crucial question—can we give a rational and consistent account of the origin and history of those psychical changes, which are of so much more use than physical changes in the work of evolution, if we begin by ignoring all questions concerning the nature and properties of that in which those psychical changes occur? It seems to us impossible to do so, because if we ignore those questions, there is no alternative left us but to accept the baldest materialism and to make all psychical phenomena the mere product of matter. In reality, there are no degrees in materialism. We have no choice except between that postulate of the spiritualistic philosophy which attributes to mental substance a separate existence and certain innate powers of its own, and the materialistic postulate that there is nothing, after all, in the universe but matter and force. To fall back upon agnosticism is simply to make a futile effort to evade this precise and clearlydefined issue.

We shall endeavor to prove this by showing that evolutionists are compelled to abandon their avowed agnosticism before they can take the first step forward in the line of their intended arguments. But we shall not undertake to follow them through any part of that long train of reasoning by which they endeavor to show that their theory explains everything, from the development of the ape into manhood down to the development of modern society, with its civilization and morality, out of the savagery of primitive man. For it covers so vast a field and takes in such a multiplicity of details that in investigating them we should be apt to lose sight of that crucial question which we have just asked, and the answer to which, when sought in any single instance of supposed development, suffices of itself to determine once for all whether the system of reasoning based upon this mass of details is true or false. We shall try therefore to simplify matters by taking a particular instance of "the survival of the fittest." Let it be that of one of those brute ancestors from whom we are said to be descended. In investigating the consistency and satisfactoriness of the agnostic principles of the evolution theory, it is best to take a concrete case like this. For it not only involves the test question upon which the value of the whole system turns; but it presents it so clearly and concisely that there is no danger of its being confused with other considerations.

Let us, then, imagine two of our apish ancestors—a little lower

than man in the scale of being—approaching a bunch of fruit which each of them wishes to appropriate to his own use. The light reflected from the body of each falls upon the retina of the eye of the other: molecular action in his nervous system is at once begun, and an impression is conveyed to his brain; and this is instantly followed by those phenomena of consciousness-consciousness of a love of life, of a fear of losing it, and of a purpose to fight for it, which alone makes his struggle for existence different from that of inanimate, purposeless things. We have here all the conditions needed for a fair trial of the materialistic postulates of the evolution theory. It would be of no advantage to us if our knowledge of physiology were perfect, so that we understood thoroughly every relation between every nervous impression, in ape or man, and its attendant phenomenon of consciousness. Nor would it help us if we could see the precise effect, both of heredity and environment, at every step, backward to the time when the ape was a mere speck of protoplasm, and forward to the time when the development of man shall have been completed. Let the chain of associated physical and psychical phenomena be ever so long, the questions upon which the correctness of the evolutionist's method of reasoning depends suggest themselves at every link, the last as well as the first. They are such as these: is that invisible something which manifests the psychical phenomena of conscious life so helplessly dependent upon that which manifests its material phenomena as to make the former practically passive so far as causing any change in the character of the psychical phenomena is concerned? As that life is developed from lower into higher forms, the quality of its psychical manifestations is so modified that the ferocity of the ape finally becomes the morality of civilized man-did this improvement originate in a power of self-development innate in the psychical part of the conscious being, or is the only knowable source of the psychical improvement to be sought in the influence of an improvement in the material surroundings of the psychical part? Since it does not matter, as we have just said, at what point in the process of development we begin such inquiries, these questions have their equivalent in one which we may ask concerning the ape who survived his antagonist in the fight for the fruit. As his love of life furnished the motive, without which his struggle for existence would never have been made at all, it is plain that all the consequences of his survival, of every kind, both to himself and to his remotest posterity, were due at bottom to the influence of that motive. It was the real root out of which grew every branch and leaf and final fruit of the tree of his evolution. The vital question, therefore, for the evolutionist, is: Was its existence or its influence in any way really dependent upon any condition of material things within or around him?

Now there is no way, as far as we can see, of deciding this point except by determining in which of his two parts, the material or the mental, his love of life and his purpose to prolong it *originated*. For in whichever part their efficient cause lay, that part must be supposed to have had most to do in sustaining the love and directing the purpose, and, consequently, most to do in deciding the bearings of the struggle, both near and remote, upon the ape and his posterity. It would certainly seem to be the one factor in his development whose powers and influence it was most necessary of all to take into account and to understand. We are obliged to infer this, unless we can prove that when once the love and the purpose were begun in the psychical part the other material part, so to speak, took charge of them, fostering, intensifying, and developing them more than did their parent part.

The question then is, whence came the ape's desire and purpose to prolong his life? The answer can certainly never be given by physical science, since it is forever impossible to apply a material test to a fact of consciousness. Nevertheless the logical methods of inductive science should be applied to its solution. The refusal to apply them here, when they are declared to be universally applicable to every subject whatever of investigation, constitutes the materialistic offence of the evolutionist. No one but an out and out materialist would say that the molecular action of the ape's body produced the psychical phenomena we are speaking of. Then, unless they were uncaused, they must have been caused by the spontaneous action of some invisible element in his nature. If there are three supposable explanations of a given phenomenon, and we are obliged after careful investigation to exclude two of them, the logic of science compels us to accept the remaining one.

Yet in the case under consideration, evolutionists seem to have an invincible repugnance to acting upon this principle. To avoid doing so, they take refuge in agnosticism, saying that they do not know what actually causes psychical phenomena. They are satisfied to give unintelligible definitions of atoms and of the action of force, but they object that the definition of the spontaneous action of immaterial substance as meaning that its acts are at least not caused by anything outside of itself, is only negative, and therefore inadmissible. Mr. Huxley thinks it equivalent to saying that its acts are not caused at all, as if it were an indisputable truth that the efficient cause of all things must be sought in matter, or nowhere at all. They are content, therefore, to assume that, whatever be the cause of psychical phenomena, any change in their quality or character is always due to a change in the material environment of that cause, and not to any innate powers of

its own, by which it may possibly control its surroundings, instead of being wholly controlled by them. Even those of them who would indignantly deny that they were materialists, have nothing to say, in treating of the evolution of psychical phenomena, of any power of self-determination in that which is the seat of consciousness. Whether they mean to do so or not, they seem, no less than the avowed materialist, to make the development of the ape's sagacity into a human intellect the outcome of the play of forces of nature upon the matter of his body, by which the latter was developed into a human body. If a third party, which was neither matter nor force, had a hand in the work, they hold that it comes within range of our knowledge only so far as it was affected by matter and force.

We shall now proceed to show that, when held to a strict consistency with these materialistic principles, they cannot give a satisfactory account of the beginning and the outcome of the supposed contest between our two apes, which we have taken as a typical case, involving the fundamental question upon which the truth of the evolution theory depends. They are compelled to conform to the logical methods of scientific reasoning by assuming that which they profess to deny, namely—that the psychical element in conscious life has certain innate faculties which it brings into exercise, independently of the influence of anything in its material environment. To prove this, let us suppose that one of the apes killed the other, and thus survived to contribute his mite to the further development of his race. What in his case did the struggle for existence mean?

In the first place, it certainly did not mean that the separate atoms of matter that constituted his body battled with each other for life. For atoms are immortal things. Of all the countless myriads of them that have been pulled about, and dashed hither and thither for millions of years, by the forces of nature, not one has ever perished. Their number now is precisely what it was when they formed the unorganized nebulous mass that once filled the universe.

In the second place, it did not mean, according to evolutionists, that there was united to his material body an immaterial substance, whose properties were intelligence and will, and that this intelligence and will made a conscious effort to preserve the bodily organization with which their own acts were so mysteriously associated. For be it remembered, that according to the grosser materialistic philosophy of which we have spoken, he was nothing but an assemblage of particles of matter, and that what we call his sagacity and will were really nothing more than the resultants of the molecular action of the atoms that composed his body. But

if so, it is of course just as absurd to suppose that this result was conscious of the molecular action that produced it, or struggled to preserve his life by prolonging that action, as it would be to say that a tune struggled to preserve the harp that played it.

Nor do we get any more intelligible idea of how his conscious struggle for existence ever came to begin, or how it came to result in his favor, and in its long train of consequences to his human posterity, by taking the less materialistic form of philosophy, which denies that consciousness can ever be the product of matter. It might indeed help us if we were allowed to assume that there was such an innate mental disparity between the apes as we often see in men. Possibly the one that survived might have had more cunning, and a fiercer and more fearless temper than the other, and on that account may have succeeded in killing his stronger foe. But that would be comparing mind with mind. It would be trenching upon a sort of mental philosophy. We would be told that, while the domain of the physical and the domain of the mental are contiguous, touching each other at every point, still it is never permissible to go over into the latter to seek the efficient cause of anything we see in the former. Even admitting that there was a superior degree of intelligence in the ape that was fittest to survive, we must keep on the physical side of the boundary line in looking for an explanation of it. And on that side we can find nothing to account for it, unless it was that physical superiority by which he and his ancestors had gotten more and better food than other apes. That is to say, his survival, so far as the evolution theory undertakes to explain it, must be considered as due to the action of the matter of his body, and not to that of his intelligence as a property of an invisible entity distinct from his body.

By this latter, then, no less than by the grosser form of the evolutionist's philosophy, we are debarred from considering the surviving ape as being, from a scientific point of view, anything more than a mere agglomeration of material atoms. We are forbidden to account for anything about him by any hypothesis concerning the independent action of a supposed mental element in his nature. Consequently, his struggle for existence can only mean that the agglomeration of atoms that constituted him struggled to preserve and perpetuate its organization as a body.

But this lands us again in the absurdities of the rankest materialism. And there is no escape from them except by taking into consideration, as the most essential point in a rational account of the struggle, the very thing which the evolutionist leaves out of view, namely, the nature and powers of that invisible something in the ape which was distinct from his physical organism. If the

question of its innate faculties be ignored, or if it be asserted that the only knowable thing that could have influenced any of its operations is to be looked for in its material environment, then we must look solely to the latter to explain the *motive* for the struggle. And this is evidently the most essential point of all. For the presence and influence of a conscious motive is precisely what differentiates his struggle for existence from that of inanimate things. It is this that takes him out of the category of those purposeless creatures that are driven aimlessly about by the forces of nature. Therefore, merely to assume the existence of such a motive, without any attempt to give a consistent account of its existence, is evidently to beg the whole question of the sufficiency of materialism to give a full and satisfactory explanation of his struggle for existence, and of his development as its outcome.

Now, how does the evolutionist account for this motive? By quietly assuming that it was furnished by the ape's natural love of life. But certainly this love was not a property of his brain, or of his spine, or of anything else material within or around him. Being a mental phenomenon, it could not possibly be an attribute or a product of the matter of his body. It must have been the property of an invisible psychical element in his nature. But concerning the powers and attributes of this element the evolutionist professes to know nothing. Of course, then, he contradicts this fundamental agnostic postulate when he assumes that he does know that it had the property of loving life. He virtually abandons his contention that he can explain the work of evolution fully, by the help of his materialistic principles alone, by borrowing from the spiritualistic philosophy the postulate he needs to keep his explanation from breaking down at the start. Without this borrowed hook, he would have nothing on which to hang the first link in his chain of reasoning. If he begins by assuming that the psychical element had no known property but that of the passivity with which it submitted itself unresistingly to the controlling influence of its material surroundings, he has no right to contradict himself by supposing that it had that active love of life which led to a struggle to prolong it, or that it had that sagacity and fierceness which directed the struggle to a successful issue. If he were consistent with himself he would admit that his reasoning begins in reality with the hypothesis that a number of atoms of matter, from some wholly inexplicable impulse, strove to hold themselves together in the form of the ape's body. It is true that his life depended upon their doing so; but why should they have cared to prolong his life at all? As they were themselves immortal, they were entirely independent of his fate. Their own life was assured anyhow, whether he died or not. Nor can we see why they should

not have been as indifferent as they were independent. For, as they were not sentient beings, it could have made no difference with them if by his death they had been separated, and then aggregated again in the form of some other animal. There is no conceivable reason why they should have preferred remaining an ape to being torn apart by a leopard and passing into his body by being assimilated as his food.

Their action therefore is utterly unaccountable, except upon the hypothesis that the beginning, the continuance, and the outcome in every respect of the struggle depended entirely upon the spontaneous action of the ape's mental part, and not in reality upon anything material within or without him. If we deny, or if we ignore this obvious fact, we are placed in the dilemma of being obliged to admit that a number of the atoms of matter first made an arbitrary and wholly inexplicable choice of a combination to enter into, and then began a fierce struggle to perpetuate it by defending it against the attacks of other similar combinations. And not only so, but they enlisted the sympathy of outside atoms. For when some of them wearied of the strife, and fell out of the ranks, by the waste of tissue and other natural processes, others at once came forward to supply their places. Thus they fought successfully to maintain their organization as an ape, until at last all became worn out with the contest, none others volunteered to take their places, the molecular action among them ceased, and the organization fell to pieces—or to put it in plain English, the monkey died.

But we may trust that he had not lived in vain. There was hope in his death. If the assemblage of atoms that constituted him had prevailed over the assemblages which constituted other apes, so as to succeed in always taking from them the largest and most nutritious fruit, and having it all to himself, he had made a double gain—a present one for himself, and a future one for his posterity. When by the use of the food he had thus selfishly taken from weaker apes his body grew stronger than theirs, the molecular action of his brain became more rapid and vigorous than that of their brains-which in the language of evolution means that his intellect advanced a step beyond theirs on the road towards the development into human intellect which was its final destiny. And when he died he bequeathed the benefit of this advance to his sons and daughters, so that at their birth they were better equipped than other apes for progress towards the goal of their race. So they in their turn handed down to their posterity this inherited advantage over their fellows; and this process went on until in the ten or the hundred millionth generation his descendants finally became men and women.

Such is the account of our origin that evolutionists ask us to accept. Before exchanging for it the account which affirms that we are not mere fully developed apes, but beings created originally in the image and likeness of God, one would think that every man would demand an absolute scientific demonstration that the latter was false, and the former true. But instead of this, those who have abandoned the old for the new account have done so for reasons that are very far from being conclusive. The one thing that they have most clearly demonstrated about their theory is their ardent desire to believe in its truth. So strong is this desire that they are perpetually ransacking the earth for evidence in its favor, and constantly professing to find it, even in such surprising places as the creases in the soles of a baby's feet. And having by dint of this incessant search added a good deal to the apparent plausibility of an idea, suggested long since—that similarity in anatomical structure might possibly be due to identity of origin—they are impatient with those who hold that mere plausibility ought not to be taken for positive proof, especially where there is question of man's origin and destiny.

To be convinced that this plausibility is deceptive, it is enough to keep in mind that one-sidedness which we have pointed out in their reasoning. For it puts them precisely in the position of a chronicler who should resolve to base his history of a nation solely upon his inspection of its arsenals of weapons of warfare. Such a writer would doubtless justify his course by giving reasons for it very analogous to those which evolutionists assign for their mode of reasoning. He would say perhaps that, while he assumed of course that the nation had always had a certain policy of selfaggrandisement, yet it had always been too carefully concealed ever to be known with certainty. Its discussion had never yet ended in anything better than mere speculations, whose correctness it would always be impossible to verify. It was wise, therefore, in him to leave it out of view altogether, along with all questions about the superior wisdom of its statesmen, and the ability of its generals, as compared with those of the nations whom it had conquered. For all these would merely lead him away from the only true source from which its history could be learned, which was simply an inspection of, and inferences from the condition of its arsenals. Nor would we be surprised, if after his beginning with such a theory, he carried it so far as to make the nation's superiority in armament the cause of its improvement in culture, civilization, and morality. We should expect him to say that so far as history could tell us, this latter improvement was due at bottom to the substitution, in the course of time, of Gatling guns and long range rifles for battering rams and bows and arrows. If he went to this extreme.

he would only make the parallel between his reasoning and that of the evolutionist complete. For while the latter asserts that the sagacity of the ape was developed into the intelligence of the man, he tells us that, so far as science informs us, this development was due to a gradual long continued improvement in the physical organization of the ape. That is, he makes the improvement in the material bodily instrument the only knowable cause of the improvement in the living intelligent agent that used it. And he takes this position only because he can see the instrument, but cannot see the living agent. He does not object to assuming that invisible atoms are endowed with powers of mutual attraction, but he is utterly opposed to assuming that the mind of man was, in its original state, endowed with such a power of spontaneous action as to raise it above the condition of a mere helpless irresponsible creature of circumstances. He prefers the hypothesis that it was once an ape's mind, wholly indifferent to the question whether it should remain such, or whether by the success of its owner in the struggle for existence, it should go on to development into a human intellect.

But let us follow the theory of evolution into the moral world, which is also claimed as a part of its far-reaching domain. will begin by giving, as briefly as possible, its account of the way in which our moral perceptions originated and have been developed into definite judgments as to the right and wrong of our acts. Here again we will take a concrete case, in which a particular thing is condemned by conscience as a vice. Let it be the sin of gluttony. How did inordinate indulgence in the pleasure derived. from food and drink come to be regarded as morally wrong? The reply is, that the judgment that it is so is simply the outcome of experience. Going back to the days of primitive man, each individual among those who first emerged from apehood doubtlesssometimes found in his own case that the bodily discomfort produced by over-eating lasted longer, and was therefore greater, than the passing gratification that eating afforded, and that it also lessened the vigor of the working of his mind. His descendants also noticed the same thing, and by a comparison of each other's experience, it came to be accepted among them as a fact that in the long run gluttony did them more harm than good. And as man's capacity for reflection increased, there doubtless resulted a conviction, in some cases slight and transient, in others more vivid and lasting, that unrestrained indulgence in the sensual pleasure of eating interfered with the performance, in the fullest measure, of the best and highest work that man was capable of. Thus the conclusion finally became general, if not universal, that taking the human race as a whole, gluttony impeded its progress

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towards the attainment of the best that was in reach of its capacities.

This judgment, that the vice we are speaking of was opposed to the true well-being of mankind, having originated in wide and long-continued experience, at last became hereditary. It was worked to a greater or less degree into the very texture of the being of every child that was born. And being now an inherited judgment, it is no longer necessary, as at first, that each individual should have a personal experience of the evils of gluttony. He comes into the world with such an inborn tendency to believe that it should not be indulged in, that actual indulgence in it is not needed to suggest the idea that it is wrong. As soon as he is old enough to reflect, he has, apart from anything in his own conduct, a feeling of responsibility in the matter, and a dread of penalty if that sense of responsibility is disregarded. That is to say, he has an inherited conscience, and when it holds its rightful sway it leads him to put the good of his race at large above the personal gratification which he might derive from the full indulgence of his natural appetites.

Now we shall have to put to those who advance this theory very much the same sort of questions we have been asking all along. If this moral judgment comes to us by inheritance, through what channel has it been transmitted to us? As it is a psychical phenomenon, and is therefore assuredly not a property or a product of matter, no physical organism could ever by any possibility have transmitted it to any other physical organism. If it came by inheritance at all, it must have been inherited by the psychical part of the son from the psychical part of the father. This conclusion is inevitable. But if so, then here again the evolutionist abandons his postulate of complete agnosticism about the powers and properties of that which is not material, by assuming that he knows at least that the psychical element in man has the power of transmitting moral judgments from father to son.

But again, we have already seen that he assumes that the ape we have been speaking of had a love of life, independently of any influence of his material environment upon that which was the seat of that love. He is compelled to make this assumption because he admits that as the love was a psychical state, it could never have been the product of any number of his different bodily states. So here also, the morbid bodily states of indigestion, headache and so-forth, though repeated in a thousand generations, could never have produced the psychical phenomenon of a moral judgment concerning the vice of gluttony. The most that they could have done would have been to furnish the occasions upon which that which had the power in itself to form such a judgment began to manifest that

power. It is clear, then, that the advocates of the experimental theory of morals place themselves between the horns of this dilemma. If we ask, was the moral judgment that gluttony is wrong produced by bodily sickness and suffering? they cannot answer yes. For that would contradict their postulate that a psychical phenomenon can never be "in any sense the product of matter." And if we ask, were sickness and pain the occasions upon which the judgment was formed? again they cannot consistently answer yes. For the occasions would evidently have been useless unless they were presented to that which had in itself the power of forming the judgment. That is to say, the conscience which they assert to be the outcome of experience must have existed, in its germ at least, prior to experience. Thus their attempt to explain the origin and development of our moral beliefs, without any reference to the question of the innate laws of man's psychical part, breaks down as completely as their attempt to explain in the same. way our intellectual development. In both cases, while asserting that the postulates of the spiritualistic philosophy are unscientific and inadmissible assumptions about that which is unknowable. they are compelled to make those very postulates the starting-point of their own reasoning.

But there is another objection to placing morality upon this experimental and utilitarian basis, which is that it requires us to believe in a most stupendous and naturally incredible miracle. Compared with this miracle, the passage of the Red Sea and the River Jordan by the Israelites was as nothing. In the latter events the wonder was that a body of water was merely held back for a time from flowing in its usual course. But on reaching the confines of the moral world, the current of evolution not only rises in a mysterious manner to a higher level, but it actually turns back upon its former course and flows uphill in the opposite direction. Up to this point in the process of development the principal motive power was utter unredeemed selfishness. The ape that advanced beyond his fellows toward the goal of human nature did so only by selfishly appropriating to his own use whatever was best adapted to his development. His own advance was impossible without an utter disregard of theirs. The degree of his progress, both while he remained an ape and for a long time after he became a man, was proportioned to his fierceness and strength, and to his willingness to use those qualities in trampling upon his weaker fellows.

But after he became a man he saw, in the course of time, the tendency and final end of that process of evolution which had made him a human being, and then he perceived that the selfishness which had brought him thus far was an obstacle to the attainment of the highest and best results which that process was capable of producing. He looked ahead and foresaw a future glory in store for his race as the final fruit of ages of development. and at the same time he saw how it was ignored and its coming retarded by those who lived for the present only and for self alone. In fact, faith in this destiny, and the hope of its attainment in the future by our posterity, are the prerogatives of those only who have learned to believe in the all-embracing reach of the doctrine of evolution. And while their number thus far is small, perhaps, yet they are so enamored with the vision of beauty set before them that, forgetful for the most part of self, they are willing to live for the good of future generations. This last lofty and unselfish motive is not, it is true, the only one by which they are actuated in their conduct. They often restrain the gratification of their appetites merely from a conviction that it lessens in the long run the amount of good that may be gotten out of a lifetime. So too, they are sometimes considerate of others, because they know that they cannot trample upon their rights without its reacting at once to the detriment of their own happiness.

But this last-mentioned refined and calculating self-love, while it is undoubtedly one of the complex motives that control moral conduct, is not the chief motive of the loftiest morality by which men may be actuated. They are capable of rising to the conception of a higher aim in life than any that merely concerns self, an aim to be attained by the sacrifice of a present and personal to a future and impersonal good. When once they have risen to this high moral plane, they curb their selfish impulses by the reflection that in the ceaseless interaction of the forces of the universe they hinder the progress of the human race toward its true goal. They cannot comprehend very clearly, it is true, how they hinder it. They cannot see exactly how, in the infinity of forces at play for millions of years, such an infinitesimal quantity as the fleeting passions of a single individual can have much effect one way or another: and in time of temptation self-love often pleads successfully that they are as nothing. But still they believe, by a sort of faith of their own, that anger and avarice and lust are evil things for the world at large, and by the working of this faith they curb their force within themselves. And thus they have come to regard the loftiest morality as consisting in so living as to hasten, as much as in them lies, the evolution of the perfect man of the future.

Such a morality is evidently in the highest degree unselfish. In this feature of it lies that stupendous change in the current of evolution of which we have spoken. It constitutes also the fatal weakness of the system as a theory of morals. The unselfishness is too pure and entire to be credible. For the man of to-day, be it

remembered, is to have no share in the future glory of his race. except the share he takes in the evolution of that glory by making sacrifices for it which will be as completely forgotten, when he is dead, as if he had never made them at all. It is true that for some noble work done by him he may be commemorated as a benefactor of mankind. But that will do him no good personally, and he enhances his unselfishness by admitting that it will do him none. For there is no personal immortality for the evolutionist. He looks upon the hope of it as an evidence of that Christian selfishness which anticipates "a joyful eternity of the harp and the tabor." He looks forward to no future life beyond the limit of that fleeting influence which the memory of his conduct may have over those who survive him. When that is gone, nothing will be left of him but that which he may have contributed as a factor to the work of evolution, which may perhaps have some infinitesimal effect upon its processes after his death, but which will soon cease to be recognized as being due to him, or to be traced back to any connection with his life.

If such entire self-forgetting consecration to a future good, in which we can have no share, were possible, the scientific morality of evolution might perhaps challenge comparison with that of Christianity. But as it sets before us the chimera of an unattainable ideal, it might be dismissed as impracticable, and therefore unworthy of notice, but for the fact that it has one dangerous feature which may unfortunately commend it to some minds. feature is that it gets rid of the fixed and definite moral code of the Christian religion. It destroys the sanctions and the restraints of conscience, in the true sense of those words, by leaving every man to be his own judge of what is morally right or wrong. For he alone is to decide how far he may selfishly indulge his passions, and how far he ought to restrain them in the interests of the evolution of the perfect man of the future. It is useless to tell the teachers of this new morality that mankind will never be held back from what is evil, and elevated to the pursuit of what is good, by any such regard for the future development of their race. It is vain to warn them that such a feeble restraint will be brushed away like a straw from its path by the whirlwind of human passion, and that to teach men that they have no personal immortality, and no responsibility to a Divine Tribunal, is to make them, not high minded philosophers living a noble life, but selfish brutes living only for the gratification of their appetites and lusts. This and all other objections to the system will go for nothing with its advocates so long as they can say, as one of them has recently done, "What a dead weight of care does morality, when viewed from the standpoint of evolution, lift from the heart of man." This it is

that makes it so attractive to its teachers that they are striving to imbue the rising generation with its principles. It is made a branch of "popular science," not from the love of a newly-discovered and loftier morality, but because it teaches a new way to escape from the restraints of morality.

The antidote for it is to make known its real meaning. When this is done, society may be safely trusted not to destroy itself by substituting the so-called scientific for the Christian standard of right and wrong. It will be only here and there that a few individuals will profess to prefer to the hope of heaven the hope of a future earthly glory of their race, in which they themselves will have no personal share whatever.

C. J. Armistead.

L'ANCIEN RÉGIME.

PART I.

THE term L'Ancien Régime is commonly employed to denote that social and political state which existed in France at the time of the French Revolution, when it fell to pieces and became replaced by what M. Taine calls "le régime moderne," as established under Napoleon. But the social and political state which existed when that catastrophe burst upon the world was a very different one from that which prevailed during the long reign of Louis XIV., and was profoundly divergent from the constitution of mediæval France, which had been slowly built up through the successive aggregation of province to province by succeeding kings. We, therefore, give a definite and very restricted meaning to the term, distinguishing it from both the mediæval and the especially regal régimes.

In the mediæval period, "state rights" and many "local franchises" existed all over France, while great political power was possessed, and many important local functions were performed by the noble "seigneurs" and ecclesiastical dignitaries. Many provinces possessed their separate "états," or legislative bodies, composed of the three estates or "orders," (1) clergy, (2) nobility, and (3) commons, or "tiers état." These local bodies almost always voted separately, that is by "order," and not by counting heads with the three orders united.

Besides these, there was the really national assemblage, the "States-general of France," which was similarly organized in three orders, and convoked irregularly by the king, according to his needs.

There were likewise the king's courts of justice—"Sovereign Courts "-also called "Parlements," which first gained a germ of political power at the beginning of the fourteenth century. Then the custom arose of communicating to the Parlement of Paris the royal legislative acts, edicts, ordinances, letters patent, etc., so that the magistrates might be enabled to conform their decisions thereto. Having been read, they were entered on a register called "The Book of Royal Ordinances"; this was at first merely a form of promulgation, but during the troubles of the reign of Charles VI. the Parlement succeeded in gaining a right of "verification" before "registration," and therewith, by degrees, a right of "remonstrance," and ultimately of refusing to register. Thus, what had originally been but a mere formality grew into an indispensable sanction, and so the Parlement acquired a certain legislative power of control, though it had no initiative. Its veto also was merely suspensive, for the king always exercised the power of forcing registration, going to the palace of the Parlement and holding what was called "a bed of justice," when the law remonstrated against was registered before the king's eyes. The States-general were too conscious of their own weakness to be jealous of the Parlement, and at Blois, in 1577, passed a decree to the effect that all edicts ought to be verified and controlled by the Courts of Parlement which, as a sort of diminutive representation of the States-general, have the power of suspending, modifying, and refusing edicts. The Statesgeneral had been last held in 1614, and after its cessation the Parlement had assumed more importance still; and since, by ancient custom—the princes and peers of France had seats and votes there -it took by degrees the title of "Court of Peers," and on great occasions it gave force to its decisions by a formula stating that they were made in a court " sufficiently furnished with peers."

But besides the king's courts, the different "seigneurs" in France had their own baronial courts, of which the tenants of their fiefs were bound to make use to the profit of such feudal superiors.

The nobles and ecclesiastics paid no taxes, all of which were borne by the commons alone. This was not then unreasonable, since the nobility furnished the national army, and church dignitaries contributed men-at-arms, according to the fiefs they held, in addition to their claim to immunity on account of their sacred

¹ We adopt the French spelling of this word as conveniently distinguishing what denotes from what is denoted by the English word, "parliament."



office and the many public services they fulfilled—in education and ministrations to the sick and poor.

The specially regal régime must, we think, be taken to begin with the decisive crushings of the till then powerful nobility by Cardinal Richelieu and Louis XIII., and to have survived till the death of Louis XIV. in 1715. Under him the nobles lost the last vestiges of political power. Municipal franchises were often ruthlessly annihilated—just as the "states" of certain provinces during the regal régime were suppressed—such as those of Hainault, Province, and Dauphiny had been suppressed by Richelieu, and Louis XIV., for the last fifty years of his reign deprived the Parlements and other royal courts of their ancient rights of remonstrance.

The remaining period, that after the death of Louis XIV., is what we understand by the "Ancien regime." During it the royal omnipotence continued to be asserted, and was, with few exceptions. still theoretically admitted; privileges and exemptions were maintained and even augmented (while divorced from their corresponding duties and utilities), and the Parlements, for the most part, made an even vexatious use of their renewed powers of remonstrance. It was a period of prolonged and increasing struggle between the reactionary tendency to revive mediævalism, an effort to maintain regal absolutism, and the gradually awakening spirit of modern political equality and social freedom. Its most essential condition was the strenuous assertion of social "privilege" and arbitrary inequality, and so its final destruction was the abolition of the division between the three estates of the realm-clergy, nobles, and commoners. Therefore, we deem that what we mean by the Ancien régime extended from the death of Louis XIV., in 1715, till November, 1789, when the division between these three orders of the state was finally abolished. As a supplement to a study of this period there might be annexed a notice of the fate of various individuals belonging to those privileged orders—as emigrants, or as survivors till the death of the last of the number, during the reign of Napoleon III.

Our present object is to show that it was the very spoiled children of that system which were the cause of its downfall—not, as is generally supposed, through jealousy of their privileges only, but actively. It was they who set the Revolution going, with the object of increasing their own power and importance at the expense of the royal prerogative. This, we think, is not yet generally known.

¹ Few persons are aware how much was done for education by the Church of France before the Revolution. That convulsion, instead of promoting education, went far to destroy it; nor even did the effort of Napoleon restore popular or higher education to nearly as good a condition as that which prevailed at the close of the Ancien régime.

From the beginning to the end of the Ancien régime, understood, as above explained, France offered a wonderfully rich field for the researches of the historical student and the antiquary. Its different provinces, annexed at different times, and under different conditions, were regulated by a chaos of diverse customs and jurisdictions, with which the powers possessed by the "intendants" and other emissaries of the central power more or less conflicted. Yet chaotic still was the social condition of the country with its ancient and its newly created nobility, and its universally diffused "seigneuries," "lordships," or "manors," with their variously ordered manorial rights and customs, which was so leading a feature of the France of that day, and its social and political condition might well be spoken of as the "Seigneurial," or "Manorial," régime.

From the time of Louis XIV.'s death, more and more havoc had been made of the religious condition of the French people. Nevertheless the multitude were still strongly Catholic even at its close, while enthusiastic loyalty and devotion to the sovereign—sorely tried as that devotion was—remained one of the most striking characteristics of the nation. The Church was also united to the state by the closest bonds,—bonds indeed which sadly fettered her action, whilst the closeness of the connection made her suffer in the popular estimation from the faults of the state.

It is easy to be wise after the event, and it is easy now to see that the greatest needs for the welfare of France were: An equitable redistribution of burthens according to the wealth of different contributors, the attribution of a useful field of political activity to the highest classes, a reform of glaring social inequalities apart from duties, and, above all, a reinvigoration of the nation's religious life through a restoration of liberty to the Church.

Unfortunately, the last-named and most supremely important of all reforms became more and more difficult even during the regal period, partly through the fault of Louis XIV. and partly in his despite.

No real religious reform is, of course, possible except in harmony with, and submission to, Rome, and the anti-Roman Gallicanism of the greater part of Louis XIV.'s reign is notorious. It was this attitude which rendered Jansenism possible, or at least prevented its being decisively nipped in the bud.

Jansenism is now such a theological fossil that there may even be some readers of this Review who have forgotten what were its most essential evils. Its most detestable errors were:

- 1. The denial of man's free will.
- 2. The restriction of the scope of redemption and the assertion that Christ died only for the elect.

- 3. The denial that the Church is infallible with respect to dogmatic facts, $\epsilon.g.$, that it could not infallibly declare that the doctrine taught in any book was in fact heretical,—a contention which, of course, would make the teaching office of the Church almost nugatory.
- 4. The assertion that we are forced to confess all venial sins, and that otherwise confession is worthless.
- 5. The condemnation of the practice of giving absolution before the performance of penance, and the recommendation of severity towards penitents.
- 6. The practice of discouraging Holy Communion because we are not worthy to receive it.

Rigorism was taught by the Jansenists and probabilism scouted as laxity, whereas the latter is the only rational system of ethics even apart from revelation. Yet it is with this absurd system that the so-called "Old Catholics" have united themselves.

Jansenism may well be described as "Veiled Calvinism." It tends to render the whole system of Christianity ridiculous, and naturally paved the way for Voltaire, Diderot, etc. Jansenism had much the same relation to theology that Cartesianism has borne, and bears, to philosophy. Not only was it the cause of such evil, but since in this world accidental defects and disadvantages attend upon the various modes in which the best directed intentions are carried out, it favored, by the reaction it excited, religious exaggerations and regrettable practices the most opposite to its own.

Towards the end of his reign, Louis XIV. became converted to better sentiments than those of his earlier years, and after supressing Port Royal, in 1709, compelled the Parlement of Paris, on the 14th February, 1714, to register the bull "Unigenitus."

But the evil previously fostered by the proud and pleasure-loving king had now penetrated too deeply and spread too widely for him to be able to undo the evil he had done, and especially to change the spirit of the Parlement which had so long been jealous of any independent ecclesiastical power, and been encouraged and supported in its disloyalty to Rome. To his amazement, the most absolute and powerful of kings found himself seriously opposed for the first time in the course of his long reign, and that opposition he had been unable to surmount when death seized him in 1715.

The profligate regent, needing the aid of the parlement to set aside the king's will and testament, restored to it the right of remonstrance, of which it had been for so many years deprived, and set free those who had been imprisoned on account of Jansenism. In a short time the parlement took upon itself to order a letter on Jansenism, written by the Archbishop of Rheims, to be publicly burned,

and condemned the Bishop of Soissons to pay a fine of ten thousand "livres" for having declared that the Church was above its decrees.

A large number of the clergy had also become infected with the Jansenist poison, and in October, 1728, Jansenism served as a rallying point for a very diverse set of opponents. In the words of a writer with no leaning to orthodoxy, the true Jansenists, the Gallicans, and all the enemies of Rome, united in one movement of opposition to the bull Unigenitus, carrying with them the discontented of all kinds—those who desired to fish in troubled waters and the lovers of novelty for its own sake. In July, 1725, the parlement took upon itself to suppress a change in the breviary ordered by Benedict XIII., and in the following year suppressed the papal brief respecting it. Small wonder that, simultaneously, the Jansenist party published its "remonstrances" to the Archbishop of Paris, wherein it was declared that there were circumstances when the pastor was forced to obey his flock, and that if the bishops, or even the Pope, oppressed the truth, it was the duty of the faithful to defend it against them; also, that if the episcopate fell into error, it should be instructed, corrected and even judged by the people. These "remonstrances" were indeed condemned to the flames by the Parlement, but they were none the less the logical consequences of that body's acts, some of which were not a bit less absurd and fundamentally destructive of all ecclesiastical order and discipline. Thus, on the 7th September, 1732, the Parlement decreed that it pertained to it alone to constrain the king's subjects, and that ecclesiastics were answerable to the Parlement(under the authority of the sovereign) for the exercise of their jurisdiction.

Thereupon followed a long period of weak, vacillating and uncertain struggles between the king and the Parlement—weak and uncertain on account of the profligacy and want of principle of Louis XV., and of the gradually increasing influence of the men hostile to all Christianity absurdly called "Philosophes." At last, in May, 1753, the Parlement was exiled, and then the evil tendencies which had gradually spread amongst the people made themselves manifest. Papers were disseminated applauding the Parlement and threatening death to the king and the bishops, and that hostility to the clergy generally, now so widely prevalent in France, already began to show itself. D'Argenson, a contemporary witness, tells us that the priests could not show themselves in the streets without being hooted. The next year the Parlement was restored, and the king exiled the Archbishops of Aix and the

¹ L'esprit Revolutionaire Avant la Revolution, by Felix Rocquain, 1878, p. 48.



Bishops of Orleans and Troyes, and in 1762, in spite of the protests of 45 bishops out of 50, the Parlement decreed the dissolution of the Society of Jesus.

In November, 1764, the king himself suppressed it, and thereupon the Parlement of Paris threatened the Pope with vengeance and the enmity of France, while the Chamber of Aix in Provence ordered a decision of the Pope to be burnt on a scaffold by the common executioner. The magistrates of Paris carried their interference with the sacraments to such an extreme as to cause the Viaticum to be borne by force to the sick in spite of ecclesiastical authority, escorted by two of its officers and a lieutenant of police.

Yet, in spite of the encroachments upon the domain of religion, which the king tolerated on the part of his parlements, he did not allow his own authority to be contested. On the 3d of March, 1766, he went in person to the Court of Justice and declared as follows:

"It is in my person alone that sovereign power resides. My courts owe all their authority and even their existence exclusively to me. Legislative power belongs independently and exclusively to me only, and the whole public order emanates from me."

While despotism proclaimed itself thus frankly, irreligion, more or less, veiled its enmity by the most detestable hypocrisy. Voltaire, who published his attacks under false names and denied their authorship, twice sacrilegiously communicated in the church of Ferney (in 1768 and 1769), and we learn from Grimm, that had he resided where he ran any risk of persecution, he would have communicated each fortnight and made a lying show of reverence to every religious procession.

At last, Louis XV. effected a coup d'état that introduced a more than ever despotic system, which rested for the last of his reign. The various parlements scattered over the kingdom had begun to correspond, and endeavored to unite themselves as a class forming one indivisible unity. The king, advised by his energetic and little scrupulous chancellor, Maupeou, speedily suppressed this attempt, and after various efforts to enforce submission, put an end to the Parlement of Paris altogether, a "Great Council" being installed in its place on the 24th of January, 1771. The consequent excitement was extreme, and the Court of Aids, presided over by Malesherbes (the future defender of Louis XVI.), offered remonstrances, wherein it dared to ask the king to convoke the States-general of the nation. For this, its president was exiled and the magistrates of the court driven from their seats by soldiery. Towards the end of the year the various Parlements of the provinces were also suppressed. Voltaire, who was no friend to the parlements, rejoiced at their suppression. The king leaned for a

time on such support as he could obtain from the clergy whose power and influence had become greatly diminished, but who became compromised by the action of the government. The enemies of the Jesuits feared their restoration, but Maupeou brought his influence to bear against them, so helping to cause the emission of Clement XIV's brief, which suppressed them (July, 1773), he restoring in return to the Pope Avignon and the County Venaissin which had previously been sequestered by the king whose end was now at hand.

On Wednesday, 27th April, 1774, Louis XV. was seized at Trianon with a shivering fit and a violent pain in the head. The next day he determined to return to Versailles. On the 20th he was bled twice, and on the 30th smallpox manifested itself with very grave symptoms, and soon fifty persons had caught the infection in the palace. His daughters (Mesdames) shut themselves in with their father, and Madame du Barry came each day to sit with him, but the king spoke little to her. Political intrigues and court jealousies almost prevented the Archbishop of Paris from even entering the chamber, and would have made the administration of the last sacraments impossible but for the action of the king himself. On the 4th of May, feeling himself growing worse and worse, he caused the Cardinal de la Roche Aymon to be summoned, and asked what the nature of his illness was. When told it was the smallpox he said: "At my age one does not recover from that; I must put my affairs in order."

He had Madame du Barry called, and said to her: "Madame, as I intend to receive the last sacraments, it is not fitting that you should remain. Arrange your retirement with the Duc d'Aiguillon, to whom I have given orders that you should want for nothing."

In the midst of all the intrigues and excitement which ensued, and in spite of the constantly increasing severity of the malady, the king preserved his courage and sang froid, repeatedly demanding his confessor, whose access seems to have been impeded. At last he came, and the courtiers, with their watches in their hands, remarked that he was sixteen minutes with his royal penitent.

At seven o'clock in the morning the cardinal just mentioned brought him the Holy Viaticum. As soon as he saw his great Almoner the sick man threw back the coverlet of the bed and endeavored to kneel, joining his hands. When the attendants sought to prevent this he exclaimed: "When Almighty God deigns to visit a miserable man like me, He must at least be received with respect." When he had communicated the Almoner turned and addressed the courtiers present as follows: "Gentlemen, the king being himself unable to speak to you, orders me to say that he repents of all his sins whereby he has scandalized his people."

Then the dying Louis whispered to him, "repeat those words, repeat them."

On the 9th he received extreme unction, and the next day, as the Cardinal pronounced the words *Proficiscere anima Christiana*, Louis XV. expired, and therewith the second act of the drama of the Ancien régime commenced.

The disputes about Jansenism and any general excitement about religious questions had now ceased to occupy the public mind. Serious, definite views as to political reform only existed in the minds of a few clear-sighted men, though there was a widespread desire for the recall of the Parlements and the fall of Maupeou.

The characteristic feature of the epoch was the perfecting of that refined social culture which was known as "Labonne Compagnie," or what we should call "good society." The tone of Versailles, and of the "Salons" of Paris, was such as the world had never seen before and probably will never see again. Our readers will recollect the oft quoted words of Talleyrand, to the effect that he who had not known society before 1789 has not known the sweetness of life.

It is true that the French language is par excellence the language of conversation, but then it has been made so by a people whose highest classes had for centuries cherished and cultivated the art of conversation, because they had nothing else to do. Great was indeed the contrast between the gentry of England and the court noblesse of France. The former, most religious in their way, resident on their estates, and busy with the many duties of squires, justices of the peace, etc., the latter religiously indifferent, if not contemptuously infidel, miserable if not at Versailles or Paris, never residing on their estates, save when exiled to them, and having neither duties to perform nor influence to exercise when there. As Walpole tells us, impiety was in the air. A sub-lieutenant had to do his Easter duties secretly if he would avoid ridicule, and the grandfather of the actual president of the French Republic had his anti-aristocratic feelings first aroused by military ridicule directed against his "pièté de bourgeois." M. De Chabannes, handsome, young, and rich, when dancing with Marie Antoinette slipped and therewith made a pious exclamation, which became a nickname which stuck to him after his return from the War of American Independence, and that evil genius of the French monarchy and grandfather of the Comte de Chambord, when as Comte d'Artois he visited Spain, laughed with the young officers, his companions, at Spanish piety, and shocked the court of Charles II.

This revolt against religion and the Church had no doubt been largely promoted by the so-called "philosophers," but it had also its aristocratic side as a distinction from the lower classes without

intellectual culture, for whom piety was good. Anne de Montmorency-Luxembourg, Duc de Beaumont said of himself: "I attend Christian worship because I am convinced of its utility for the people." The same spirit showed itself even amongst the high clergy, who were exclusively aristocrats, in spite of the number of those who edified the world, and especially England, in the days of their suffering and emigration. Amongst the unedifying may be mentioned, M. de Jarente, Bishop of Orleans; M. de Talarn, Bishop of Coutances, and M. Louis de Grimaldi, Bishop of Mans (who would wear his hunting dress under his vestments at Mass); the Archbishop of Narbonne, and especially the Archbishop Leomenie de Brienne, afterwards cardinal. He is related to have said to the Abbe de Boisgelin, who had incurred the disgrace of a scandal necessarily prejudicial to his advancement: "Why did you not wait—till you were a bishop?"

But in spite of the apparent elegant trifling and regrettable religious indifference or worse, there was a considerable taste for social progress and quite a passion for scientific knowledge.

The advance of physical science during the reign of Louis XVI. was remarkable, but even more so the extent to which it became a fashion of the day.

The chemist, Fourcroy, had twice to seek a larger amphitheatre, so great was the crowd of gentlemen and elegant women who attended his lessons. Antony Petit's course of anatomy was so crowded that even the windows were used as seats. Geology and zoology were taught by Buffon, electricity by Nollet, astronomy by Lalande, and the doctrines learned during the day formed the subject of conversations at the renowned suppers of the period. Deparcieux was invited each year to the chateau of Brienne, where he found a collection of natural history and physical instruments for his use during the course of lectures he had to give to the ladies who passed the summer with the cardinal. The names also of Coulomb, Malus, Lavoisier, Berthollet, Guyton de Morveau, Daubenton, Bichat, and Lamarck should not be omitted, and certainly not those of Antoine de Jussien and Romé de Lisle, immortally connected with botany and crystallography.

Meantime the privileged classes, though ready enough to coalesce against attack from the unprivileged, had much jealousy among themselves. We have seen the hostility of the parlements to the Church, and there was a strong antagonism between the provincial noblesse and that which resided at the court or in its vicinity. There was an increasing outcry against abuses, but hardly one individual was willing to accept a reform which put an end to those abuses by which he himself profited.

The young king, Louis XVI., was full of good disposition, but,

as our readers know, had a terribly weak character. Moreover, he was strongly impressed with his rights as an absolute monarch, and quite unwilling to surrender any of them. He was also scrupulous to a fault as to any interference with property not absolutely inevitable, and the feudal rights of the seigneurs were a form of property. It was natural also that he should sympathize with that class to which all his intimate friends belonged, as also that he should partake of that mode of regarding "privileges" which was common to the society of which he was constituted the head and summit.

He came to the throne on the 10th of May, 1774, amidst transports of delight which manifested themselves far and wide.

The Chancellor Maupeou's coup d'état of 1771, was not only a restoration of absolutism, but he also sought to consolidate all those institutions which had formerly supported it, and to remove from them all liberal innovations. He restored the venality of municipal offices, returning to the system inaugurated in the worst days of Louis XIV., and applied retrograde principles to all the branches of government and administration. For all that, France was then, through the habit of nearly two centuries, so docile that her discontent, for the most part, only showed itself in the witty sayings of the salons and some pamphlets; so that the chancellor was confident and triumphant till death removed his master.

Then the friends of progress felt hope revive, and expected reforms and ameliorations from the well-known goodness of heart of the young king. And the opportunity was great indeed. The Empress Maria Theresa at once wrote to the French queen, her daughter, as follows:

"France has immense resources; there are, indeed, enormous abuses, but they are now themselves a great resource, since their abolition will ensure benedictions from the people. The perspective before you is grand indeed." Such was truly the case.

The first act of the young sovereign was to dispense with his right to "joyous accession," which was indeed a gain of 40,000 livres to those who would have had to pay it, and the queen similarly renounced her right to the "Royal Girdle," an act which caused the writing, by an unknown hand, of the word Resurrexit on a pedestal of Henry the Fourth's statue.

Unfortunately the king called to his aid the frivolous old Comte de Maurepas—a man whose sympathies were entirely with the abuses and corruptions of the old system. To the delight of the Parisians, who illuminated, the king exiled Maupeou, who was burnt in effigy by the populace, and summoned to his ministry the celebrated economist Turgot, who was everywhere esteemed as an honest man, and had been adored in Limousin, of which province

he had been the intendant. His first act was to establish free-trade in grain throughout the interior of France, and his next was to do away with those systems of forced labor known as Corveés. But he was a strong advocate of absolute power, and desired a "patriot king."

He joined with Maupeou, the Archbishop of Paris, and other bishops, in urging the king (with much reason, as we shall see) not to restore the Parlements, and he desired to establish a universal system, or hierarchy, of municipalities—not elected, but nominated —with a grand national municipality in the place of the Statesgeneral-to the convocation of which latter he was strongly opposed, as tending to deprive the king of much of his absolute legislative power. He thus, in some respects, ran counter to the national aspirations, and he did not take sufficient account of the traditions and social customs which had grown up and so long existed in France. He was not possessed of Catholic sentiments, and had even conceived the idea of national secular education. He also took small account of the dispositions of men likely to suffer from his proposed reforms. Financiers, courtiers, men who lived by abuses, and not a few of the clergy, therefore coalesced against him, and on the 12th of May, 1776, the king yielded to the various influences brought to bear against his ministers, and dismissed Turgot.

With him disappeared every well-grounded hope for the peaceful transformation of the Ancien régime—a transformation afterwards rendered absolutely impossible by the action of the Parlements.

In spite of Turgot, the Parlements were restored soon after his nomination as minister, Louis XVI. causing letters to be written to all the exiled magistrates to direct them to appear at their palace in their official costume on November 12th, 1774. There and then the king held a "bed of justice," whereby he restored the old order of things, destroying the work of Louis XV., and gave the nation a conspicuous triumph at the expense of royalty.

His action necessarily caused discontent to those who had suffered from the tyranny of the Parlements, and the Archbishop of Paris, who had trusted that at least the control of matters ecclesiastical would have been withdrawn from the restored Parlement, did not disguise his disapproval. Thereupon Louis XVI. gave him to understand that if he caused trouble to the government he would not, as his grandfather had done, limit himself to a sentence of exile, but would hand over the archbishop to all the severity of the laws.

The restored Parlement soon justified the dislike which Turgot had manifested to its restoration. It refused to register his beneficent edicts. He sent a deputation to beg the king to retract them,

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and made the following singular declaration: "The occupation of the nobility is to defend the country against its enemies, that of the clergy is to edify and instruct the people, while the duty of the rest of the nation (incapable of performing such lofty services) is to pay taxes, promote industry and carry on manual labor."

It seems to have been after these representations that Louis XVI. said: "I see very well that there is no one but Turgot and I who really care for the people."

For a time the king persevered, and on the 12th of March, 1776, forced the Parlement to register, holding a "bed of justice" for that purpose, to the delight of the masses, who were transported with joy. But very few, save the lower classes, supported the minister who fell through aristocratic opposition and intrigue and the hostility of Marie Antoinette. Turgot was bound to enforce economy by the bad state of the finances, but the queen prevailed on the king to give to her favorite, the Princess de Lamballe, a sinecure post with 150,000 livres of income, and finally, offended by Turgot's recall from the London Embassy of a friend of hers, the Comte de Guines, obtained his dismissal, though her desire that he should be imprisoned in the Bastile was not gratified.

Then the king undid the work of Turgot as he had previously undone the work of Louis XV., thus discrediting his own authority in the eyes of the nation. Finally, after the first ministry of Necker, he accepted and authorized a frank movement of reaction under Maurepas and Joly de Fleury, thus destroying his first chance of dominating and directing the revolution which had become inevitable, but might have had a very different character from that which it subsequently presented.

Indeed, Louis XVI. had the opportunity, if he had had the intelligence and the requisite firmness of will, of acquiring even more power than Louis XIV., and of becoming a legitimate and peaceful Napoleon, but with far more stable authority; as the traditional loyalty and reverence of the French nation would not have been weakened.

But it would have been foolish to expect Louis not to have been the son of his own age; and yet he might have been more, for Mirabeau was *much* more, yet even Mirabeau would not have understood the first requisite of political success, which was a true religious reform—and true religion was far from being in fashion at the close of the eighteenth century.

The first requisite was, no doubt, a new concordat with Rome. In exchange for a salutary legal extension of papal power in the country and real reform in the abolition of pluralities and other crying abuses, there is little doubt but that such a rearrangement of Church property could have been effected as would have produced

an augmentation of the poorest benefices, an increase in the sums already devoted to charity and instruction, as well as some relief to the overburthened exchequer by an equality in taxation. At the same time serious reforms might have been effected in certain religious houses—possibly with some suppressions.

The second requisite was to abolish the exemption from taxation of the nobility, to do away with their oppressive feudal dues, and to make their distinctions, as a caste, purely honorable, while at the same time giving to them in common with the higher members of the third estate, duties to fulfil analogous to those fulfilled by the higher classes in England. Had it been possible for them alone to have borneall the costs and charges of the army and navy, they might, on the condition that they did so, have continued with justice to enjoy their exemptions and dues. But, as such a thing could not have been endured by them, they might have been fairly called upon, since they had ceased to play that part which they had effectually played in feudal times, to give up privileges which entailed no corresponding sacrifices, and to pay their taxes like the rest of the community.

Such a measure would have caused the mass of the nation to support the king with the greatest and most effective enthusiasm, but would have met with the most determined opposition from all the parlements of the realm. It would have done so because the Parlements were essentially aristocratic institutions, and their noble members themselves enjoyed the very immunities in question. That they would have opposed such reform is certain, because, as we shall see, they did, in fact, oppose with all their might reforms tending in that direction which were presented for their acceptance.

They would have coalesced with the rest of the nobility; and doubtless a large number of the higher clergy (who were all nobles also) would have supported them, and together they might have been able—and they certainly would have tried—to excite a civil war, their great wealth necessarily giving them the command of many men.

Therefore, to have secured that predominance which Louis XVI. might have secured, two preliminary efforts were necessary: One of these was the opening of the Parlements freely to the members of the "Tiers-Etât," and the effecting of a gradual but decided predominance within them of that third estate, at the same time depriving them of all control over matters ecclesiastical, and reducing their function of registration to that merely formal character, of an official publication, which it originally possessed.

The other preliminary need was the introduction of such changes in the organization of the army, and such ameliorations in the treatment, especially as regards food, of its "rank and file" as might have secured its discipline and fidelity to the crown under all circumstances. The first condition of such fidelity was the throwing open of all commands to the third estate, with the occasional promotion of men who had shown themselves good and capable soldiers, and every way worthy of trust.

Unhappily for France a directly contrary policy was pursued by the king and his government after the fall of Necker, when Maurepas and Joly de Fleury entered upon a course of frank reaction.

In the first place, instead of insuring the fidelity of the army by popularizing it, a regulation was made, in 1781, which required of every one who should aspire to be an officer of either infantry or cavalry, a formal proof of four degrees of nobility, without counting the applicant's own. There was but one exception, that made in favor of the sons of knights of St. Louis. When Louis XV. came to the throne no such restriction existed. Any man could become an officer without proving even one degree of nobility. In 1750, so far from closing the door against the just emulation of the third estate, the king not only kept this door open, but promised to bestow on commoners who were officers of distinguished merit, the much-coveted recompense of hereditary nobility.

The irritation which the regulation of 1781 excited amongst the members of the third estate is not to be described, and, as we shall see, it did not render the nobility any more devoted to the support of the king's government.

But the reaction was by no means confined to matters military. Whereas, formerly very distinguished members of the higher clergy and the magistrature had been members of the third estate, no members thereof were any longer tolerated in either of these bodies. Bishoprics were declared to have been made for the benefit of "persons of quality," and the court decided that henceforth none but nobles should be appointed abbots or vicars of religious houses.

After the army regulation of 1781, the Seigneurs, from one end of France to the other, began to examine into their feudal rights, with the intention of restoring to their full vigor any which had fallen into desuetude or neglect. In this they were efficiently served by the Parlements, whose sympathies were entirely with the aristocracy. Even the ancient custom of making vassals kneel and swear fealty to their seigneurs, was at least occasionally reintroduced.

By the intervention of the Count d'Artois, Calonne was made minister—a man of many resources and great dexterity—but (as our readers no doubt recollect) he found himself unable to reestablish order (owing to the disorganized finances of the state) without taxing the privileged orders. As a means of effecting this, he devised the plan of convoking an assembly of "notables." the moral force of which would, he hoped, overcome any resistance on the part of the Parlement of Paris. He had thought of convoking the ancient "States-general," but, according to their old plan of voting, by "order" and not by "head," he feared that such a convocation would but furnish the nobility and clergy with an opportunity of re-affirming and establishing, more forcibly than before, their privileges and exemptions. The idea of forming any kind of deliberative assembly was a great innovation, and one which Mirabeau affirmed that he had suggested to Calonne. The latter flattered himself that the members of the assembly, being selected by the king, would, for the most part, be so gratified by the honor done them, that they would show their gratitude by a complete subservience to the royal wishes. He took no account of the reactionnary spirit which had shown itself on all sides since the regulation of 1781, while he counted too much on the king's power and resolution.

The assembly of notables was composed as follows: There were seven princes, 39 nobles, 12 members of the Royal Council, 11 clergymen, 33 members of different Parlements, two members of the Court of Accounts and two of the Court of Aids, 12 deputies from provincial states, one civil lieutenant and 25 municipal officers—144 in all.

Calonne, himself an aristocrat and a minister who had sought, by all possible means, to gratify the Court and avoid the reform of prodigalities, was driven, by dire financial necessity, to frankly seek toleration in the reform of abuses and the abolition of immunities from taxation. It was strange, indeed, then, that for this purpose he should have had recourse to an assembly, the members of which, benefited by such abuses, attached an extreme importance to their conservation, not only on account of their pecuniary interests, but also through the pride of caste. The assembly was designed to overpower the resistance made by the magistrates (in their Parlements) to reform, and, nevertheless, no less than thirty-eight of them were summoned to it.

Yet, Calonne did not hesitate to address the most forcible words to this almost hopeless assembly. After making clear the utter disorder of the finances, he said: "What resources have we left, to supply all that is wanting. . . . The abuses! Yes, gentlemen, it is in those very abuses that a fund of wealth exists, of which the state ought to make use to re-establish order. It is in the abolition of abuses that we can attain the one means of supplying all our needs. It is from the bosom of disorder that a supply may be obtained which will fertilize all parts of the monarchy." . . . "The abuses are only supported by private interests, the wealth and

consideration of individuals and antique prejudices, which time has permitted to survive; but what can their vain confederation effect against the public welfare and the necessities of the nation? The greatest abuse of all would be not to attack abuses, save those in which only the weakest members of the community are interested. It is those which are the most considerable and the most protected which we must now annihilate. It is those which bear most heavily upon the laborious and productive classes."

As our readers know, with the exception of a vote in favor of causing all proprietors to contribute to the maintenance of public roads, the assembly was dissolved on May 25th, 1787, without agreeing to recommend any real reform. Calonne meantime fell, and was succeeded by the Archbishop Leomenie de Brienne.

The unpatriotic conduct of the notables was less wonderful, because, in the first place, the third estate had as yet given little sign of life, and the mass of the people continued tranquil and passive, while, in the second place, pamphlets were daily published in order to stimulate their resistance, and, as usual in France, some of them assumed the form of jeux d'esprit. One such has been preserved by Sallier, which ridiculed the prime minister's warning to the notables that they had been summoned to advise him, not as to the substance (fonds) of reform, but as to the fashion of carrying it out. It runs as follows:

"In those days Calonne said to his disciples: 'The Kingdom of France is like unto a father of a family, who, having assembled in his courtyard his various domestic animals, spoke to them as follows:

'My dear good friends and very worthy creatures,
Fowls, ducks and chickens, pigeons, geese and turkeys,
Be good enough to put your heads together,
And thence draw forth your very best of reasonings,
Freely debating, long as you may wish to,
About the project which I have in hand.—
About its fashion, not about its substance.
The first and most courageous of my servants,
Moved by a great desire of purest goodness,
Tells me that you by Heaven have been created,
All for my glory and to grace my kitchen,
I am, therefore, about to cook you all;
That is the manifesto I put forth,
But pray select what sauce shall be employed,
For all the rest I on my cook depend,'"

With the disappearance of the notables, the Parlement of Paris came forward in vexatious opposition to the attempts of the Government to somewhat extend the area of taxation, by means of a land tax and a stamp act. On the 16th of July, 1787, it assembled

to prepare an address to the king, begging him to withdraw his edicts. They also asked that an account of the "states" of receipts and disbursements might be communicated to them. All of a sudden a voice was heard to cry out: "It is not states of receipts and disbursements we want, gentlemen, but the 'States-The idea met with a modified acceptance. The Parlement did not refuse the stamp edict, but rather excused itself from either accepting or rejecting it, by adopting a formula likely to carry with it very grave consequences. Its words were: "The nation alone, as represented in its States-general, can give the necessary consent to taxation. The Parlement has not the power to give that consent. . . . Charged by the sovereign to announce his will to the people, it has never been charged by the people to act as its representative." Thus the Parlement actually accused itself of an usurpation which it had practiced from time immemorial; abjuring in a single day (either for the sake of opposing the government, or yielding to a patriotic movement) pretensions which it had been pushing further and further for centuries. But subsequent events showed clearly that the Parlement of Paris, and all the other Parlements, were far more concerned about maintaining the dignity and augmenting the power and wealth of the privileged classes than about the welfare of the nation generally.

These classes made war freely on the king's government, and did not, as we shall see, hesitate to promote revolutionary disorder in order to paralyze it. Their own wish was that they themselves should profit, and profit exclusively, by the lowering of the royal authority.

Thereafter ensued a prolonged struggle between the government and the Parlements. On the 6th of August, 1787, a bed of justice was held at Versailles, whereat M. d'Aligre, the president of the Parlement, in protesting against the proposed laws, affirmed that they tended to engender discord between different members of the same family, and between "seigneurs" and "vassals." This was where the shoe really pinched. The proposed laws not only taxed the seigneurs, but allowed their vassals, assembled in parish meetings, to see that the charges were distributed equitably. On the 13th of the same month the Parlement assembled and passed another resolution, in which it re-affirmed that the king could not lawfully impose a tax without having previously convoked and consulted the States-general. In the preamble to this resolution, however, the magistracy made clear what was their secret thought in calling for the States-general. Therein they declared it to be "contrary to the primitive constitution of the nation and to its principles, which would be adhered to by the States-general, that the clergy and the nobility should be submitted to a territorial tax,

together with the commons, and that it had been reserved to our days to see such a system proposed." The Parlement thought that, thanks to an observance of the ancient custom of the Statesgeneral voting by "orders," the clergy and nobility, having two votes to one, would certainly maintain their existing privileges, even if they could not acquire new ones.

For this end they, as before said, did not scruple to make use of revolutionary means. It had always been the custom to keep their proceedings secret, but they had now accustomed the public to be told their resolutions as soon as passed, and a crowd was encouraged to wait in the halls of the building and applaud the members as they came forth from the great chamber. The people came to regard such information, not as a favor, but as a right, and thus, on one occasion, the Archbishop of Paris (who as duke and peer had a seat) was insulted for refusing to reply to such questions, in spite of his well-known benevolence and virtue. Already a precedent was thus established for those tumultuous demonstrations whereby the mob influenced, and sometimes dominated, the decisions of the future national assembly. On the 13th of August, no sooner had a conspicuous opponent of the ministry, M. d' Epremesnil, appeared than he was seized and carried in triumph to his carriage by a tumultuous movement, just as others had been howled at and hooted.

There is no space in this article even briefly to discuss the struggles which took place between the weak and divided government of the king and the perversity of the parlements.

In a few days, that of Paris was exiled to Troyes, but was recalled on the 20th of September, 1787, having in the meantime been energetically supported by provincial parlements. At last, in May, 1788, came the coup d'état, which again, for a time, put an end to the parlements in favor of a "plenary court," thus once more returning to the system of Maupeou, in the last years of Louis XV. But this time the new court was still-born, and the government had to struggle on till it restored the parlement on September 24th, after which it continued till, having lost its popularity, it was finally destroyed by the Revolution.

Meantime, great and important changes had taken place in the provincial organization and administration in France—changes which served to show on the one hand the persistence of the higher orders in maintaining their privileges generally, and on the other hand the fruitful results of more moderate and patriotic conduct on their part in the Province of Dauphiny. The idea put forth by Turgot, of giving provincial assemblies to the whole of France, had been modified and submitted to the assembly of notables by Calonne in February, 1787. His proposition was that a local assembly should

be instituted in every province which had not preserved its ancient provincial "estates." In these new provincial assemblies there was to be no distinction of orders; that is, the members were to deliberate together, and votes were to be taken by counting heads.

Now, the nobility and clergy were well-disposed, indeed, to welcome provincial assemblies which might checkmate the despotism of the intendant of each province, who was appointed by the king. They wished this as they also desired the States-general, in order also to checkmate the despotism of the ministry. Nevertheless, they understood by such bodies assemblies organized in their own fashion, with a two to one preponderance for themselves. No wonder, then, that they were opposed by the notables and by the Parlement, but the decree establishing them was, nevertheless, registered in June.

They encountered, also, much local opposition. Thus the Province of Hainault protested against the decree, alleging that formerly these were regular provincial "estates," of which they had only been deprived by an abuse of royal omnipotence. Therefore, since Louis XVI. wished to undo the faults of his predecessors, he was entreated to restore them the old order of things, modified by the needs of the time. This prayer was acceded to, and on the 8th of February, 1788, a royal declaration was registered by the Parlement of Douay, according to which the estates were to be restored, but the members of the third estate were to be twice as numerous as either of the others, while they were to deliberate in common and vote by counting heads.

The same claim was advanced by Dauphiny with important consequences, as will appear later on.

The Province of Guyenne never possessed "estates," but the Parlement of Bordeaux none the less opposed the June decree as an attack on aristocratic privileges. Though exiled, it defied the government, refused to register, and invoked an assembly of the States general.

The Parlement of Besançon opposed the decree as applicable to Franche-Comté, making use of violent and revolutionary expressions, such as that "the measures proposed may break the ties of attachment between subjects and their sovereign." The Parlement of Rennes also used no less violence, suppressing and condemning any publication they disliked, while publishing statements not only violent, but false, as to the expenses of the royal administration.

Nevertheless, towards the end of 1787, the provincial assemblies began to meet in those provinces in which their union had not been prevented by the opposition of the local Parlements. The arrangement was that half the members were at first to be nomi-

nated by the king, and these were to elect the other half; then, every year one-quarter was to retire and be replaced by others, who were to be chosen according to a very complex system of election.

But the system of royal nomination disappointed its authors. It was not from members of the third estate that any special opposition came. It was the nobility and clergy who offered opposition, on the ground of the power still left to the royal "intendant" of each province. Thus the Duc d' Ayen wrote from Haute-Guyenne to the prime minister: "It is impossible for me to express the disgust and consternation of the members of the assembly, or how the desire to become members of it and the zeal of all the best citizens is being extinguished."

The archbishop and duc of Rheims protested very vehemently against the presence of the intendent, and still more of his delegates in the assembly. It was not the members of the third estate who made these objections. It was the "grands seigneurs" and the Church dignitaries alone, who were so shocked at the presence of the royal functionaries.

Often aristicratic influence succeeded in overcoming that of the prime minister. Thus the intendant of Lyons, having become engaged in an obstinate and acrimonious dispute with the assembly of the province, great lords and prelates made use of their influence at Versailles, and succeeded in forcing him to submit. The most interesting and instructive local conflicts between the waning royal power, the aggressive aristocratic spirit, and the nascent modern desire for freedom were those which took place in Bearn, Brittany, Dauphiny and Province, but we have not space here wherein to present even the slightest sketch of their most salient features. We propose to describe those struggles, and the last efforts due to the obstinacy of the privileged orders, down to the fusion of all in the national assembly, in a second article, which will conclude what we have to say on what we deem an instructive and deeply interesting subject.

St. George MIVART.

OUR CONVERTS.

IVINE faith is a certain and undoubting assent to revealed truth: "the substance of things hoped for, the evidence of things not seen."—St. Paul. "The commencement, foundation and root of our justification." - Council of Trent. "It is faith that saves us, because it is the perfection of our good works, as well as their principle."-Bourdaloue. Although, when we have once truly received divine faith, we can say with St. Paul, "I know in whom I have believed, and I am certain"; yet it is clear, upon reason and theology, that the truths of revelation are not of themselves self-evident; and hence cannot, of themselves, constrain the mind to belief. Human intelligence and divine grace, the former prepared by some study of the mind, and the latter moving the soul, are necessary to impose the obligation of believing. Divine faith is a supernatural gift, coming alone from God. How small a proportion of human beings, compared to the whole, have been able to receive it! The late Father Hecker, and other eminent Catholics, hence have believed that Christianity is yet in its infancy. Perfect as it was, as it came from our Saviour, its apostolate among men, its history, the fulfilment of its divine mission, its progress towards uniting all in the one fold, are so unfinished as to be but beginnings. To that great majority of mankind not yet receiving divine faith, Catholic theologians have exercised signal justice and charity. We know the possibility of divine grace and faith pervading every human soul on earth. Heresy is only such, according to St. Thomas's Summa, when it is error pertinaciously maintained and manifestly against the faith. It is clear, according to all Catholic theologians, that all such, whether pagans or Protestants, who are in good faith and sincerely desirous of knowing the truth, are claimed as belonging to the soul of the Church. St. Augustine said that men must be drawn not forced to the truth; and Cardinal Manning, in his Vatican Decrees, etc., said, "faith is an act of the will, and to force men to profess what they do not believe is contrary to the law of God, and to generate faith by force is morally impossible." It required the most forcible decrees of Popes to arrest the subjection of the northern nations of Europe by military force to profess the faith, as was done by the two Olafs, Kings of Norway, who would challenge a whole nation to receive baptism, or fight.1 The very nations thus

¹ Bollandists, Acta Sanctorum.

converted by force were the first to apostatize in the sixteenth century.

If then inculpable ignorance and good faith bind so large a portion of mankind to the soul of the Church, what shall we say of those favored souls, born and educated without, but now become enriched with the grace of divine faith, and whose good deeds are made perfect by faith? How easily does faith come to us Catholics. who have received the inheritance! But the triumph of faith is most sublime, where it is acquired by sufferings, sacrifices, trials and heroic self denial! Our converts are those who have been born and educated outside of the body of the Church, who by their good faith have belonged to the soul of the Church, and who by divine grace and their own superior efforts, have fought their way into the body of the Church; those who, perceiving the light of truth, embraced In every age and country has the Church honored her converts, and has entrusted to them high and holy missions in the great work of saving souls. And this too, in spite of certain prejudices against converts in general which exist even among Catholics. In countries, where the faith is universally accepted, and where the pastoral office is consequently limited to the guardianship of the organized flock—"for I know my sheep and my sheep know me"—the missionary spirit is not called into active effort, and consequently the zeal of Christian propagandanism weakens; the good faith of outsiders is not trusted, and even converts are coolly regarded and often distrusted. But in countries like our own, where the Church is militant, and where her divine mission to teach all nations is her normal condition, conversions mark her conquests, and converts are welcomed as heroic co-laborers in the great mission of the future. It is true, we do not see in our day such conversions as those of St. Paul and of Constantine the Great, by miraculous signs and wonders in the heavens: but each conversion now, as then, is a miracle, either in the natural or the supernatural order. And each convert, like St. Paul and Constantine, has a special mission in the grand economy of salvation. With the great body of our converts, though fruitful, their missions were modest and humble; but many there are, who, by their learning, eloquence, writings and good works, have made the faith shine in the firmament and before the eyes of men, both priests and laymen; champions of the truth which they so heroically embraced, and heroes of Christian charity. According to St. Thomas they were probably never heretics.

Theories which group conversions into movements and trace them to a common historical cause, are interesting and instructive. While in England the advent of the *emigré* clergy from France is supposed to have led to the great Oxford movement, which cul-

minated in the conversion of John Henry Newman and a host of other English divines, it would be difficult to trace a similar cause and effect in America; even though a Bruté, a Dubois and other exiled French confessors of the faith came and joined the missionary labors of the infant Church in the infant Republic; and even though the writings of the Oxford Tractarians were not unstudied in this country. Yet it must be acknowledged those individual conversions, such as that of Dr. Ives and perhaps those of Father Preston and of Bishop Curtis, may have been influenced by the Oxford tracts. The general fact with American conversions has been that they were individual. Each convert, no doubt, exerted an influence upon his family, his friends and his social circle; and there was scarcely a conversion that did not lead to another. or to many. Each conversion was a little movement in itself. pebble thrown into the waters of the smallest rivulet makes its splash and its ripples; it is said to be susceptible of scientific proof, that its movement is felt across oceans and in the remotest waters of the earth. So it is with the conversion of the humblest soul returning to the centre of truth and unity!

In 1776 the Catholic population of the colonies struggling for freedom was estimated at 25,000 in a total population of 3,000,000, or $\frac{1}{120}$ of the whole; we have no record of there having then been converts among those 25,000 Catholics. In 1790 we had 30,000 or more, probably 32,000 Catholics, or $\frac{1}{107}$ of the whole; in 1800 we had 100,000, or $\frac{1}{53}$; in 1810 we had 150,000, or $\frac{1}{48}$; in 1820 we had 300,000, or $\frac{1}{32}$; in 1830 we had 600,000, or $\frac{1}{21}$; in 1840 we had 1,500,000, or $\frac{1}{11}$; in 1850 we had 3,500,000, or $\frac{1}{7}$; in 1860 we had 4,500,000, or $\frac{1}{6}$; in 1878 we had 7,000,000, or $\frac{1}{6}$; and in 1890 the official census of the United States shows the entire population to have been 62,885,548, while the Catholic population was estimated at 12,000,000. One of our bishops placed it at 14,000,000. It would be impossible to estimate the number of converts to the faith in this 12,000,000 of Catholics—would that we could approximate to the number! There are few Protestant families in America that do not count one or more Catholic converts at their homes or amongst their immediate connections; such has been the case with the families of General Ethan Allen; Presidents Madison, Monroe, Van Buren and Tyler, of Henry Clay, Daniel Webster, General Grant, of General Winfield Scott, Edward Everett, of Nathaniel Hawthorne, and of many other equally distinguished American Protestant families. Our statistics are meagre; but we have a few. In 1853, Archbishop Hughes confirmed at one time 236 persons in New York, of whom 36 were converts, or nearly \(\frac{1}{2}\); out of 65 persons confirmed on one occasion in Ohio nine were converts, or about 4: Archbishop Henni, of Milwaukee, confirmed on one day 150 persons, of whom 21 were converts, or about \(\frac{1}{4}\); and during a period of five years Archbishop Spalding. of Baltimore, confirmed 22,200 persons, of whom 2752 were converts, or about $\frac{1}{10}$. In the prison and hospital for Confederates captured in civil war no less then 600 were baptized. There was a single congregation in North Carolina, which was composed entirely of converts. A list of prominent converts published a few years ago contained nearly 700 distinguished names. Estimating the number of converts from July 4, 1776, to the present time, and the descendants of deceased converts within that time still remaining Catholics, upon the basis of this 700 distinguished names being one-twentieth of the whole, we would now have the converts of to-day and the descendants of all converts since the Declaration of Independence, amounting to 700,000. Again, we may now, in 1893, safely estimate the entire Catholic population of the United States to be 14,000,000; estimating the entire number of converts at this moment, and their descendants remaining faithful to the Church of all converts since the Declaration of Independence, at 20 per cent, of the whole number of Catholics in the country, we would again find the whole number to be 700,000.

This number represents the convert element in our Catholic population of 14,000,000 in 1803, which shows the glorious and triumphant gains of the Church from the Protestant sects. It is a significant fact that few converts have been made by the Catholic Church in this country from the ranks of infidelity, atheism, deism, and other schools rejecting Christianity. The Protestant sects, those professing Christianity and struggling for the light of truth to the best of their opportunities, have yielded up to the Church, from the bosom of error, this goodly army of sincere and devout Catho-Episcopalians by their love of religious antiquity and episcopacy, Presbyterians by their ardent advocacy of the principle of ecclesiastical authority, Methodists by their intense culture of the personality of God and of the Saviour, Puritans by their hatred of Erastianism and opposition to what they took to be idolatry, the zeal of Evangelicals against mere formal religion, and other sects, while blindly rejecting many revealed truths, yet cherishing some particulars of true religion, have proved themselves nurseries of conversions and promoters of some beautiful features of Christian truth, and probably themselves may prove to be the links by which all Christians will some day be brought into the one fold of Christ. When we consider the extent of this element of converted Catholics only in our own country, there is great and pregnant hope for a united Christendom.

In the paper which I read before the Catholic Lay Congress at Baltimore, in 1889, I expressed the opinion that the list of 700

prominent converts might probably have been raised to 2000. When it is considered that the body of American converts have given to the Church eleven of her eminent members of the hierarchy, and including Bishop Northrop, the son of a convert, twelve. and four of these were archbishops, we must acknowledge, not only the numerous constituency standing at their backs, but also the zeal, the faith, the learning, the charity, the fidelity, the apostolic spirit, which pervade the entire body of American Catholic converts. With the aid of the list of 700 prominent Catholics, and my own memory and data at hand, I will give a list of the most eminent members of our fold who have come to us from without the Catholic Communion. But I cannot claim that it is complete or faultless. Col. Lionel Britten, Rev. John Thayer, Rev. Prince Gallitzin, Gov. John Sim Lee, Adam Livingston, Eliza A. Bayley. Revs. Daniel, Virgil and Samuel Barber, Fanny Allen, Col. Dodge; Archbishops Whitfield, Eccleston, Bayley and Wood; Bishops Rosecrans, Tyler, Young, Wadhams, Becker, Gilimour and Curtis: Orestes Augustus Brownson, Levi Silliman Ives and Mrs. Ives. a daughter of the Protestant Episcopal Bishop Hobart: Stephen C. Blyth, Stephen Burrows, Rev. John Richards, a Methodist minister; Rev. John. Kewley, pastor of St. George's Church in New York: Rev. F. E. White, Rev. George E. Ironside, Rev. Samuel F. Jarvis, Rev. Maximilian Oertel, a Lutheran minister: General William Starke Rosecrans, a brother of Bishop Rosecrans; Capt. George Deshon, now a Paulist priest; Gen. Eliakim Parker Scammon, Col. Charles Larned, Capt. Haldeman and Lieut. Joseph C. Ives, of the Army; and Commander Ward and other officers, of the Navy; Rev. Isaac T. Hecker, founder of the Missionary Priests of St. Paul the Apostle; Rev. Augustus F. Hewitt, Rev. Mr. Homer, Rev. Mr. Wheaton, Rev. Thomas S. Preston, Rev. Mr. Whitcher, Rev. Jedediah Vincent Huntington, Rev. William Henry Hoyt, James A. McMaster, Dr. Thomas Addis Emmet, Dr. Edward L. Keyes, Rev. Donald X. McLeod, George D. Wolf, Gov. Peter H. Burnett, Hon. Lemuel Sawyer, Gen. John E. Newton, Gen. Charles P. Stone, James A. Williams, Major Strobel, Rev. James Kent Stone, now Father Fidelis, of the Pasionists; Mrs. Emma I. Mason, Fathers Searle and Hill, Rev. Clarence Alphonsus Walworth, Father James Clark, S.J.; Father Shaw, S.J.; Mrs. Sarah Peter, Mr. and Mrs. George Parsons Lathrop, Saiah M. Brownson Tenney, Mrs. Anna H. Dorsey, Mrs. Madeleine Vinton Dahlgren, Miss Eliza Allen Starr, Mrs. Waggaman, a sister of President Tyler; Mrs. Connolly, Mrs. Starr, now Mother Veronica of the Sisters of the Divine Compassion; Mrs. Elizabeth F. Ellet, Dr. Henry James Anderson, Lucius Northrop, father of Bishop Northrop, of Charleston, S. C.; Messrs. Major, two brothers, one of whom wrote his

"Reasons for Becoming a Catholic"; Dr. McLaughlin, of Oregon, head of the Hudson Bay Company; Gen. Hill, Mr. and Mrs. Edward Ives, Miss Fanny Becham, of Virginia, now Mother Superior of the Visitation Convent, at Georgetown; Rev. Alfred Young, Rev. Father Tillotson, Rev. Father Baker, Col. George Bliss, Mrs. R. O. Glover, who was a descendant of the Leslie who drove Catholics from New York in 1688-9; Rev. Thomas V. Robinson, Rev. Henry H. Wyman, Rev. Clarence E. Woodman, Rev. Algernon S. Brown, Rev. Lewis G. Brown, Rev. A. R. Nevins, Rev. T. Cyril, of the Passionists; Rt. Rev. George H. Doane, Mr. and Mrs. Oliver P. Buel, their son and daughter, the former being a Jesuit; Mary Agnes Tincker, Charles Warren Stoddard, Miss Hemenway, Mrs. Laura Keene, Rev. Thomas Henry, Rev. F. Matthias, Rev. J. C. Russell and five children, Gen. Foster, Professor Oswald Dorsey, Misses Kane, Mrs. Julia Gardiner Tyler, widow of President Tyler; Dr. W. H. Van Busen, Rev. Pierce Connolly and Mrs. Connolly, Franklin H. Churchill, Rev. Calvin White, Rev. Charles D. Ffrench, Thomas Walley, uncle of Wendell Phillips, and his grandson, Dr. James Robie Wood; Madame Octavia Levert, of Alabama; Rev. George F. Haskins, Hon Thomas Ewing, United States Senator and Secretary of the Interior: Messrs, Beckwith and Weichmann, Mrs. John Barry, wife of Commodore Barry, of the United States Navy; Mrs. Andrew Jackson, wife of a revolutionary soldier; John Bowman, Robert Lee, of Kentucky; Dr. John Millon Harvey, Miss Mary Elizabeth Wagner, Miss Mary Ignatia Forney, Mrs. John Elv. Rev. Sam'l Cooper, Mr. Strobel, our consul at Bordeaux; John Douglass, Hayden Smith, Miss Alden, Rev. George J. Goodwin, Capt. Bela Chase, Colonel Hyde, Messrs. White and Nichols, of Vermont: G. G. Smith, B. H. Smalley, Mrs. Cynthia Penniman, Miss Laura P. Smalley, the Misses Barlow, Mr. and Mrs. Noah Tyler, Dr. Greene, of Maine: Joseph Brigden, Frances Taylor, Lucius I. Barber, Judson W. Perkins, J. B. Smith, Miss Wilhelmina Jones, a daughter of the celebrated naval officer. John Paul Jones: Miss Virginia Scott, daughter of General Winfield Scott; Keating Lawson, Miss Eldridge, of Lansingburg, New York; Miss M. Annina Corrie, Madame Sarah Jones, of the Sacred Heart; Major Noble, Miss Edmonia Lewis, Mrs. James Elder, Mrs. John C. Seton, Mrs. Miriam Meredith, sister of William M. Meredith, of Philadelphia; Judge M. E. Manley, of North Carolina; Judge Tenney, son-inlaw of Dr. Orestes A. Brownson; Judge Heath, of North Carolina; Judge Moore, of North Carolina; Judge Rice, of South Carolina; William B. Watts, Howard Haine Caldwell, Richard Alexander Caldwell, Dr. John Bellinger, of Charleston, South Carolina; Edmund Bellinger, Jr.; Miss Susan Bellinger, Misses Harriet and

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Bradford, Mrs. Mary Bradford, a sister of Mr. Jefferson Davis; Mrs. Mary Brown, Mrs. Louis Hamersly, Mrs. Hathaway, Mrs. Elizabeth Fitzsimon, Mrs. Miles, mother of the author, George H. Miles; Mrs. Elizabeth Thompson, of Portland, Oregon; Mrs. Arnold, of Chelsea, Massachusetts; Mrs. Henry Sprague, Mrs. Robert Williams, wife of General Robert A. Williams; Mrs. Lewis C. Levin, widow of the Know Nothing leader in Philadelphia; Mrs. Gubert, Mrs. Cummings, mother of Rev. Dr. Cummings, of New York; Mrs. J. Fairfax McLaughlin, Mrs. Ferdinand E. White, Mrs. Mary Stobinger, Mrs. Mary A. Woodbury, Mrs. J. J. Greeves, Mrs. J. Watson Taylor, Mrs. Fanny S. Samples, Mrs. George Miles, Mrs. C. A. Van Dormenden, Mrs. Ann Rudolph, Mrs. George P. Hooper, Mrs. Sherwood Callaghan, Mrs. Alfred Bibby, Mrs. Mary Josephine Green, Mrs. Conrad, Mrs. Lewis Worthington, Mrs. George Worthington, Mrs. Maria Tucker, Mrs. Joseph Galibart, Mrs. Samuel Ward, Mrs. Thomas Dwight, Mrs. Nathan Matthews, Mrs. A. I. Croswell. Mrs. Frederick Flagg, Mrs. William Taylor, Mrs. Emily Farnum Dorsey, Mrs. Moses Farnum, Mrs. J. H. Stickney, Mrs. Henry Wyman, Mrs. F. M. Parker, Mrs. Jane King, Mrs. Clara M. Thompson, Mrs. Dr. Cooke and Dr. Cooke, of Chicago; Mrs. Emma G. Salter, Mrs. Rebecca Stephens Salter, Mrs. R. M. Hodges, Mrs. Jane Wade, Mrs. Lydia Peak, Mrs. Charles F. McKenna, Mr. and Mrs. R. M. Johnston, Mrs. Anderson, Mr. and Mrs. Charles A. Ingraham, Mr. and Mrs. Julius A. Palmer, Mr. and Mrs. Theodore Metcalf, Dr. and Mrs. John Dean, Dr. and Mrs. Richard H. Salter, Mr. and Mrs. Charles R. Mainard, Mr. and Mrs. Henry L. Richards, Sr., Mr. and Mrs. W. T. Wilkinson, Mr. and Mrs. Charles

Clauson, Mr. and Mrs. Geiger, Mr. and Mrs. R. A. Mills, Mr. and Mrs. Joslin, Mr. and Mrs. George F. Emery, Mr. and Mrs. T. W. Hornsby, Mrs. Sophia Brewers, Mrs. Mary J. Simpson, Mrs. Mary Leonard, Mr. Leonard Ives, Mrs. Simmons, of Oregon; Mrs. Cynthia M. Thomas, Mrs. Lucy Gormly, Mrs. Mary Anderson, Mrs. Sara Sancier, Mrs. Edward C. Cody, Mrs. Hemmerly, Mrs. William H. Hunt, wife of the Secretary of the Navy, William H. Hunt, under President Garfield; Mrs. Mary Graham Cahill, Mrs. Sarah H. Kelly, Mrs. Walworth, of New York city, mother of Rev. Clarence Walworth; Mrs. Witzell, of New York; Mrs. E. P. Scammon, wife of General Scammon; Mrs. General John Newton, Mrs. General Phil. Kearney, Miss Helen Davis, sister of Admiral Davis; Miss Emma Carey, Miss Marion Longfellow, a relative of the poet Longfellow; Miss Charlotte Dana, Miss Mary Lewis, Miss Mary Stevens, Miss Lorillard-Spencer, Miss Henrietta Dana, Miss Florence Lyman, Miss Julia Metcalf, Miss Minnie S. Downey, Miss Susan Osborne, Miss Madalena Woodbridge, Miss Margaret Blaine, daughter of Hon. James G. Blaine; Miss Bertha Rutledge, Miss Anna Barnum, Miss Alida V. S. Harwood, Miss Virginia Cleveland, Miss Matilda Dana, Miss Addie Parks, Miss Annie M. Cary, Miss Emma Irwin, Miss Sarah Bowker, Miss C. E. Porée, Miss Emeline L. Stevens, Miss Jane Frances Ripley, Miss Susie Raynor, daughter of Hon. Kenneth Raynor, and niece of the Protestant Bishop Polk; Miss R. V. Roberts, Miss Agnes Lena Roy, Miss Fannie King, Miss Terry, of Charleston, South Carolina, who was received into the Church at Rome; Miss Dora Young, Miss Emma Swingle, Miss Emma Dixie Porter, Miss Sallie Loring, Miss Laura Davis, Miss Mollie Harkins, Miss Cora Anderson, Miss Annie Eback, Miss Sarah L. Hate, Miss Mary J. Salter, a daughter of Chaplain Salter of the United States Navy; Miss Helen J. Salter, of Boston, now a Sister of Mercy; Miss Leonora Salter, Miss Edith Agnes Salter, Miss Amelia Sanderson, Miss Annie Miles, Miss A. Cooper, Miss Annie Fisher, daughter of Judge Fisher, of Washington; Miss Christine Fisher, Miss Annie B. Fisher, Miss Susan McElheny, Miss Mary Myers, Miss Dora Lewis, Miss Mary Kittell, Miss Fannie Bradshaw, Miss Maud Muller, Miss Margaret Everett, Miss Hannah Prescott, Miss Ellen Dawson, Miss Julia Guernsey, Miss Rosecrans, daughter of General Rosecrans; Miss Ord, Miss Emma Wixon (Mlle. Nevada), the Misses Everett, nieces of Hon. Edward Everett: the Misses Kearney, daughters of General Phil. Kearney: the Misses Pierce, Miss Ann Hampton Brewster, Dr. Joshua Huntington, Horatio R. Storer, Dr. Hasket Derby, Dr. Johnson Elliot. Dr. Elgin T. McMurray, Addison Niles, Dr. W. H. Van Buren, a nephew of President Van Buren; Dr. John D. Bryant, Alvin G. Lankford, Dr. Simon Pollock, Dr. James M. Youngblood, Commodore Francis M. Ramsey, United States Navy; Dr. Elisha H. Gregory, Dr. Moses L. Lenton, Dr. George A. Sterling, Dr. G. A. Coggeshall, Dr. Green, of East St. Louis: Dr. W. E. Horner, Dr. Nicholas F. Cooke, Dr. T. T. Cabamus, Dr. Henry T. Hewit, Dr. Charles H. Budd, Dr. Isaac B. Craft, Dr. Vance, of Cleveland, Ohio; Dr. Russ, of New Mexico; Dr. Bigelow, of Detroit; Dr. William Faulkner Brown, John C. H. Dieman, Mus. Doc.; Captain Ward, of the United States Navy; Captain Kelly, Commodore Guest, Rear-Admiral Andrew Allen Harwood, Rear-Admiral John C. Beaumont. Warren K. Southwick, Thomas Southerland, Hannibal Green, Hugh B. Stoughton, Franklin H. Churchill, John White, of New York; William H. Guion, Edward Everett, of Chatham, New York; William J. Phillips, Theodore Blume, Charles H. Knight, Nelson Wood, Sylvester J. Megargee, J. M. Wilcox, Samuel Kilpatrick, James N. Morris, H. W. J. Garland, George Woodward, George M. Dexter, Julius Clarence Estes, Michael Perry Estes, James M. Rand, John Breckenridge McKay, Henry Green, Charles Ellis Ruching, Henry M. Dixon, William Fisher, William Shrieve, Mr. Brawnfield, Isaac B. Lovejoy, Lawrence Lottier, William C. Taylor, John B. Tabb, Charles Austin, George Anderson, George Boyle, Ignatius Harkins, Andrew Foskcett, Jackson Davis, Julian Metcalf, Henry Parks, E. T. Turner, Stephen F. Hoggs, M. Hunt, of Weymouth, Mass.; Robert Whetmore, Gustav L. Brann, Albert Myers, R. Bacon, William E. Jones, Alfred Anderson, George C. Leach, George A. Leach, C. M. Ward, John W. Twombly, Henry Blake, H. D. Fitzgerald, Henry Adams Thayer, Alfred Peterson, Lewis Mills, George B. Keen, Chandler Berrian, Thomas Chase, Colonel D. S. Lamson, Judge and Mrs. Arrington, of Chicago; Thomas Chase, Arthur Marsh Clark, J. M. Gould, Messrs. Scott, Carlisle and Woodworth, students at Annandale, New York; Mr. Elbert, of Detroit; Mr. Chapin, of Springfield, Massachusetts; Henry Rosecrans, Mrs. Margaret Bleeker Harwood, Madame Gaston de Fontevilliant, a sister of Mrs. William K. Vanderbilt; Edward De V. Morrel, Professor John S. Ermenstrout, Rev. John S. Sumner, a Jesuit priest; Rev. F. A. Spencer, who became provincial of the Dominicans; Rev. Edward Dwight Lyman, Rev. W. J. Simmons, a Paulist priest; Mrs. Joseph Drexel, Mrs. Hicks Lord, Mrs. John J. Coppinger, daughter of Hon. James G. Blaine; Mrs. Thomas Francis Meagher, Mrs. Elias Higgins, Miss Ella B. Edes, Miss Frances C. Fisher (Christian Reid), Miss Mary Agnes Tinker, George V. Hecker and Mrs. Hecker, Paul Revere, grandson of the celebrated Paul Revere, of Boston, who gave the midnight alarm to the patriots of the Revolution; Rev. Edward Welsh, of the Society of Jesus; Mr. Eben Faxon, Thomas 'E.

Waggaman, great-nephew of President Tyler; Mrs. Thomas J. Semmes, of New Orleans; Mrs. B. J. Semmes, of Memphis; Col. Rice W. Payne, Dr. and Mrs. Chilton, of Virginia; Mrs. Georgianna d'Arbranches, Mrs. W. Hildreth Field, Mr. George W. Riggs, the banker of Washington, Miss Anna Smith, daughter of Commodore Smith of the American Navy, Hon. Truman Smith and his daughter, Mrs. Whelan, of Philadelphia, Miss Georgianna Campbell, Miss Mary Pannel, Rev. Francis Barnum, S.J., now engaged in the Alaskan missions; Dr. Peterson and Gen. Russell Thayer, of Philadelphia.

This lengthened list contains many names distinguished in the annals of our country, in the civil, military, naval, diplomatic, scientific, and literary service. We could give many details of an interesting personal, biographical, and historical character in regard to a great number of these eminent converts if time and space permitted. Indeed, the material is or could be made sufficient for a book of thrilling interest. But why write a Catholic book in America? Its publication is one thing, but to be reimbursed for its cost of publication is quite another. Where omissions occur the writer will thankfully receive additional data.

That remarkable and suggestive phase of our theme—the fact that our converts have come to us chiefly from Christian sects, and not from infidel schools of religious thought and study-shows what power there is in the very name of Christian, and still more how strong is the power of those Christian tenets which are openly and fully professed by the sects; and even yet how infinitely more potent is the grace of God. But even here we must not forget the Indians, who have even craved the faith; for, as Cardinal Manning has so forcibly and so benignantly expressed it " The work of the Holy Ghost, even in the order of nature, so to say—that is, outside of the Church of God and of the revealed knowledge of Jesus Christ among the heathens—that working is universal in the soul of every human being." How many of us Catholics, who have received the gift of the faith through Catholic ancestors, had the case been reversed and had we been born and educated in the sects and in the errors of the sectaries—how many, I say, of us could feel assured that we would have been among the 700,000 Catholics now forming the convert element in the American Church? How many of us would, by our superior zeal, our greater learning, our co-operation with special graces, now be members of the religious orders, priests officiating at the altar, spouses of Christ, eminent laymen, authors and scientists, benefactors of religion, and even members of the American Catholic hierarchy, as the seven hundred eminent Catholics have been, or as those we have named above? How remarkable are the cases of those who, when they

saw the truth, were able to rise above the errors of education. and had the heroic courage, often under appalling difficulties, to embrace the faith! Such, indeed, has been the fortitude of our converts. And even more than this, they have embraced every suffering of mind and body, made every sacrifice of wealth, family, friends, country, and social position; silenced every voice of sentiment, affection, and society, and hearkened to the voice of conscience and the teachings of truth. It is at this juncture, and at this part of our subject, that the Church and her divine mission, as the depository, the witness and the teacher of truth, vindicates her apostolic character, and, with loving and gentle offices, receives. as a devoted mother, the children whom she loved but had never embraced. It is by a recognition of the Church, in her divine mission of truth and love, that converts feel their faith anchored to the rock of eternal truth. It will prove interesting to trace this fact—the open and clear recognition of the Church—in the conversions of some of our most eminent converts, whose cases we will notice singularly and more particularly. Henceforth the subject will be treated more historically. For, although St. Paul says that even the heathens, by the light of nature, may come to the knowledge of God, and are culpable if they do not;" " For the same is Lord over all, rich to all that call upon Him"; yet, it is the Church which proves to be the constituted channel of supernatural light for the conversion of sectarians, who had honestly thought they saw the Church in other communions.

In Maryland, from the very foundation of the colony, in 1634, the zealous Jesuit fathers, while evangelizing the Indians, labored most earnestly for the conversion of the Protestants who came out from England with the Catholic gentry, and so successful were their apostolic labors that a great part of the Protestants in the colony became Catholics. The Church was represented then and there by the Jesuits, the children of Loyola, types of the priesthood of the Church.

An interesting conversion, three-quarters of a century later, was that of Col. Lionel Brittin and one of his sons, in 1707, in Philadelphia. It is true we have some knowledge of the presence of Catholics in Philadelphia as early as 1686. The general impression has been that the Jesuits from Maryland did not commence their visits to Philadelphia as early as this, and Dr. John Gilmary Shea, under this impression, attributes the conversion of Col. Brittin to the Franciscans, who had been sent over to Maryland some years before. Mr. Martin I. J. Griffin has found a will, in the Philadelphia records, of one Peter Debuc, who died in 1693, and who bequeathed

¹ Rom., i., 20.

² Rom., x., 12.

£50 to one Father Smith, which he supposed was an alias of one of the Maryland Jesuits-Father Henry Harrison or Father Thomas Harvey. It is true that Father Steivnmeyer many years later went to Pennsylvania and New York under the alias of Father Ferdinand Farmer; but it is difficult to explain why a disguise should have been assumed by Catholic priests in Pennsylvania, in 1686, since in 1664, nearly a quarter of a century before the conversion of Lionel Brittin, William Penn had declared: "And in order that each may enjoy that liberty of conscience, which is a natural right belonging to all men, and which is so conformable to the genius and character of peaceable people and friends of repose, it is established firmly, not only that no one be forced to assist in any public exercise of religion, but also full power is given to each to make freely the public exercise of his own, without meeting with any trouble or interference of any kind, provided that he professes to believe in one eternal God, all-powerful, who is the Creator, Preserver, and Governor of the world, and that he fulfill all the duties of civil society, which he is bound to perform towards his fellow-citizens." However, the little flock of five or six Catholics must have assembled at Christmas or at New Year's, 1707-8, in Philadelphia, to witness the reception of Col. Lionel Brittin and his son into the Church, and Mass must have been celebrated for them, most probably by one of the Jesuits of Maryland. The necessity for a long and previous preparation and instruction of the father and son in the tenets of the Catholic faith, may well suggest the occasional visits of Catholic priests to Philadelphia at that early period. In 1732, only a quarter of a century later, St. Joseph's chapel was built, when the little Catholic flock of Philadelphia was estimated at forty But Lionel Brittin and his son must probably have had the consolation of attending Mass about or at the time of their reception into the Church, for it was very soon afterwards. January 8th, 1708, that Rev. John Talbot, afterwards the first Episcopal bishop, wrote to the secretary of the London Society for the propagation of the gospel-" Arise, O, Lord Jesus Christ, and help us, and deliver us for Thine honor! . . . There's an Independency at Elizabethtown, Anabaptism at Burlington, and the Popish Mass in Philadelphia." How rejoiced must those early pioneers of the faith have been at attending the Holy Sacrifice, and seeing the increase in the flock! And yet how differently the Rev. Mr. Talbot viewed that prophetic scene! Col. Lionel Brittin was a man of wealth and position; he was the church warden of the Protestant Church. It is quite certain that a number attended the Mass, and such, too, was the commotion which so important a conversion produced, that we find it again mentioned in Hill's "History of Burlington," giving the same or another letter from Mr. Talbot,

the future Protestant bishop; "I saw Mr. Bradford at New York: he tells me Mass is set up and read publicly in Philadelphia, and several people are turned to it, amongst which Lionel Brittain (Brittin), the church warden, is one and his son another." It may be that there were other converts, for Mr. Talbot says several were turned to the Mass, and amongst them Colonel Brittin and his son. But, in this earliest of American conversions, where the name is known, we find the Church organized and at her mission—the pillar and the ground of truth! the rock of ages! the Spouse of Christ! represented by the priest, the Mass, the Crucifix, the altar, the Holy Eucharist! Thus, in Pennsylvania, under the mild and gentle administration of William Penn, a Quaker, Mass was allowed by law to be celebrated, and the attendance of Lionel Brittin and his son, the new converts, and the few other Catholics of the city at Mass, elicited only a complaint from Bishop Talbot to the London authorities. In neighboring Maryland, however, founded by Catholics on the basis of religious liberty, and made the "land of the sanctuary" for all who suffered for conscience's sake, at that very same period, the public celebration of Mass was prohibited in Catholic Maryland from and after the Protestant ascendency under William and Mary, in 1688, and could only be privately performed in the mansions of the wealthy gentry, or in private chapels erected on their estates, such, for instance, was Carroll Chapel, on Carroll Manor; Barry's Chapel, on the site of the City of Washington, Boone's Chapel, on the estate of Henry Boone, the maternal great-grandfather of the present writer, and many other chapels forming a part of the buildings of the messuage or manor.

The next conversion of eminence was that of Rev. John Thayer, Congregational minister, of Boston; and though it stands in contrast with that of the eminent layman, Lionel Brittin, of Philadelphia, it was identical in this, that they were both accomplished through a recognition of the Church as the pillar of truth. John Thayer was a member of one of the oldest and most wide-spread families of New England. Averse at first to study, his education commenced, in fact, when he was sixteen, and under Rev. Dr. Chauncey he studied well, entered the Protestant ministry, and was two years chaplain at Castle William, when feeling an inclination for foreign travel, he went to Europe in 1781, and after travelling through England and France, he reached Rome about the beginning of 1783. While visiting the galleries, ruins, and basilicas of the Eternal City, an event happened which filled the city with religious awe: a Saint had just died at Rome. It was St. Benedict Labre, the mendicant, the real type of voluntary poverty; one who, in our country and times had he approached the gate of a private residence, all unkempt and ragged, a pilgrim of prayer though he

were, would have been driven away as a tramp. But in Rome there was an odor of sanctity that pervaded the atmosphere at his death and soon the rumor was bruited around that God had shown favor to his faith and his self-denial by the working of miracles. Though Mr. Thayer had read some of the grounds upon which Catholic tenets rested, he loathed the thought of miracles and the invocation of the Saints. The talk of the city was now about the miracles of St. Benedict Labre wherever he went: and he, with many other Protestants then in Rome, denied and ridiculed the supposed miracles. This was a perilous position for a young Protestant, a minister from Boston to take, for a Roman gentleman challenged him to an investigation of some of the miracles of the deceased pilgrim-mendicant. Mr. Thayer was an earnest man-he had never founded or started heresy, as Luther had, nor was he pertinacious in adhering to it, for he knew no religion but the one he had received from his parents—he consented to go and investigate. To his astonishment he found the facts unquestionable: the miracles were proven, as he stated on his return, by testimony which would have been received in any American court of justice as proof of any fact. He at once saw that God was pointing out the Catholic Church as the depository of revealed truth—how could her teachings be false, or her mission other than authentic, when she possessed the gift of miracles, the very means by which our Saviour, on earth, had proved his mission? John Thayer was received into the Catholic Church on May 25, 1783. He had several audiences with the Holy Father. who bestowed upon him a crucifix he ever afterwards preserved and revered. The tradition that he went to Rome to convert the Pope has no foundation. He returned to France, where he entered the College of Navarre, was received into an institution for recent converts, and became a student of the Seminary of St. Sulpice. He himself, also, afterwards became a pilgrim, and visited on foot the Monastery of La Trappe, and the home of St. Benedict Labre at Amette. He completed his studies at St. Sulpice, and was ordained as a Catholic priest by the Archbishop of Paris about the year 1786. He dedicated himself to the missions of his native country. While awaiting orders from Bishop Carroll, he became a missionary in Paris and London, especially among the English He converted many Protestants. He arand Irish in Paris. rived in Boston in 1790. He was fired with an extraordinary and apostolic zeal to labor for the conversion of his countrymen, and especially of his late associates in error. He ministered to the little flock of Catholics in Boston, and while zealously attending to parochial duties, he publicly announced his purpose of preaching in the neighboring towns, and his readiness to answer all objections against Catholic doctrines. He soon had

his hands full of controversy, and met many antagonists; amongst whom was Rev. George Lesslie, who vauntingly announced that, "As the gauntlet is thrown down by Mr. Thayer, it is taken up by George Lesslie." Mr. Thaver had issued no challenge, but he was ever ready for the encounter, and he was acknowledged as the victor. No sooner had Father Thaver silenced Mr. Lesslie. than he was violently assailed by an eminent lawver named John Gardner, and by many anonymous writers. His zeal was unbounded. His weekly conferences were largely attended by the leading people of Boston, and he made a number of converts. He served as missionary in several places, including Kentucky, where he was a zealous missionary from 1700 to 1803. His zeal and manner became almost intemperate, so much so as to offend the cooler temperament and better judgment of Bishop Carroll. Their differences led to Father Thayer's retirement from America to Ireland, where, as an humble and poor missionary, he devoted the remainder of his life to the relief and welfare of the poorest part of the inhabitants of Limerick. Here he died, amid the benedictions of the poor whom he had so zealously served, and by whom his name is revered to this day. He left behind him written memorials of his faith and mission, which will be alluded to again. While in Europe, he raised a considerable fund for the introduction of the Ursuline Nuns into Boston, and the establishment of the first New England Young Ladies' Catholic School, which, in the hands of bishops Cheverus and Fenwick, led to the founding of the Ursuline Convent and School of Mt. Benedict, at Charlestown. which, on the night of August 11, 1834, was ruthlessly destroyed by an incendiary fire applied by an infuriated mob of fanatics.

The scene of eminent conversions is now shifted from Boston to Maryland; from the land of the Roundheads and Puritans to the land of the Cavaliers and Catholics. Of the ancient and distinguished family of the Lees, eminent in English as well as in American annals, was Thomas Sim Lee, one of the revolutionary fathers of the Republic; now, away from fields of religious controversy, and amid the gentle influences of a Catholic home, sanctified and enlightened by the good example and virtues of a devout Catholic wife, an American recognizes the true Church in the sanctity of its members, and joins the one fold of Christ. Governor Thomas Sim Lee's ancestors, the Lees of England, were of Norman descent, and were amongst the companions of William the Conqueror. Lionel Lee, in 1192, had served with other English Cavaliers in the Crusades under Richard Cœur de Lion. The pioneer of the Lees in America was Richard Lee, whose sons founded the Lee family of Virginia, with the exception of Philip, who went over to Maryland, and was the founder of the Maryland Lees. Among the Virginia Lees, some of the illustrious men were Richard Henry Lee, statesman; Francis Lightfoot Lee, a signer of the Declaration of Independence; Henry Lee, known in Washington's army as Light-Horse Harry; Robert E. Lee, commanding the Confederate forces in 1861-64. Among the Maryland Lees, the most distinguished member was Thomas Sim Lee, who, after holding several local offices, was Governor of Maryland from 1770 to 1783, a delegate to the Continental Congress in 1783-4. and a member of the Maryland Constitutional Convention in 1786. In 1704, he was elected United States Senator from Maryland, but declined to serve, Governor Lee was born in Frederick County, Maryland, in 1744; on October 27th, 1771, he married Mary Diggs, the only child of Ignatius Diggs, of Melwood Park, Maryland, a family as distinguished among the old Catholic families of England and of Maryland as the Lees were among the Protestant families of England and Virginia, Mr. and Mrs. Lee warmly espoused the cause of American Independence, and thereby lost the sympathy and received the rebukes of their relatives on the Lee side in Maryland, who were rovalists. Mrs. Lee headed the ladies of Maryland in their exertions for the relief of the sufferings of General Washington's soldiers in the Revolution, and received a letter of thanks from the General in 1780. Mrs. Lee was at once a devoted patriot and an ardent member of the Catholic The Catholics of Maryland sided with the cause of liberty and independence. Her pious example deeply impressed her noble husband, and on one occasion he made a vow to her when she was dangerously ill, that he would join the Catholic Church, the Church of her fathers and his, the Church which had fired the hearts of his ancestors and hers to join the Crusades for the rescue of the tomb of the Saviour. He kept his promise, and became a Catholic about the year 1800. Among the family treasures of the Catholic Lees was found a copy of Thomas à Kempis, which was presented to Mrs. Lee by that other eminent convert, Prince Gallitzin, the missionary of the Alleghenies, and who had assumed the humble name of Father Smith. Governor Lee wrote in the book the following inscription; "The gift of the Rev. Mr. Smith to Mary Lee, 1788, passed by the ever-to-be-lamented death of my beloved wife to me, her inconsolable husband, Thomas S. Lee." Governor Lee afterward built a memorial church in Frederick County, Maryland, on his estate, Needwood Forest, which was called St. Mary's, in honor of the celestial patroness of Mary Lee. Several children of Governor Lee intermarried with descendants of Charles Carroll, of Carrollton, and their descendants have remained true to the faith of their Catholic ancestors.

Following a Pennsylvania Protestant, a New England Puritan,

and a Maryland cavalier, in the line of conversions to the Catholic faith, we will now briefly relate the case of a Russian nobleman, Prince Demetrius Augustine Gallitzin. Born of noble parents, his father was a member of the Greek Church and Russian embassador to Holland; his mother, a daughter of General Von Schmettau, of Austria. Both had been admirers of Voltaire during the youth of Demetrius, who had received no religious training. In 1786 the princess, his mother, became a Catholic, and was now most solicitous for the faith of her son, who was destined for the army. Accustomed to hear the Catholic side from his mother, and from his father and his visitors the reasonings of non-Catholics, infidels, unbelievers, reformers, Greeks, Protestants, theorists of every school, young Gallitzin, at the age of maturity, about 1787, to the joy of his admirable mother and in answer to her prayers, became a member of the Catholic Church. His father expected that his associations with officers of the Russian Imperial Guard would correct all this. Demetrius received a commission in the Austrian army, as aide-de-camp, in the first campaign against France, in 1702. In the midst of European disturbances an imperial order excluded foreigners from the Austrian army, and it was decided that Demetrius should make a trip to the young American republic. A young, learned, and pious priest, Rev. Felix X. Brosius, was chosen for his companion. They sailed from Rotterdam on August 18, 1792, and on the voyage he assumed the name of Augustine Schmettau, or, as it was rendered in America, Schmett or Smith. In this voyage, so pregnant with future results, Father Brosius and young Gallitzin seemed to repeat the ancient Scriptural story of the archangel and young Tobias—the priest and the prince, the Raphael and Tobias. His vocation was developed and confirmed on the voyage; he arrived at Baltimore on October 28th, entered the Sulpitian Seminary, and, in spite of the remonstrances of both his parents, at the loss of a commission in the Russian army and the forfeiture of his inheritance, he accepted ordination at the hands of Bishop Carroll, on March 18, 1705. He was the second priest ordained in the United States. After several temporary missions, Father Gallitzin was sent, in 1700, to Maguire's Settlement, in Pennsylvania, where there were only a dozen Catholic families. Here he undertook the founding of a Catholic colony, purchased twenty thousand acres of land, built a log church in 1800, erected the town of Loretto in 1808, in the heart of the Alleghenies and of his apostolic mission. His work resulted in the establishment of Cambria County, with Loretto as its capital. On the death of his father, in 1803, he again refused his mother's request to return to Europe to litigate for his inheritance with his relatives, and in 1808 the Emperor of Russia decided that he had forfeited his inheritance by becoming a Catholic. His great undertaking involved him in pecuniary embarrassments, but large remittances, first from his mother and then from his sister, enabled him to pay his great obligations; he expended \$150,-000 on his cherished mission. His colony proved a success; mission after mission arose, and Ebensburg, Carrollton, St. Augustine, Witmore, Summitville, and several thriving Catholic missions flourished in what the apostle of the Alleghenies found one of the wildest of American wildernesses. His little log church of 1800 was then the only Catholic church between Lancaster, Pa., and St. Louis, Mo. Unable to get an assistant, Father Gallitzin attended all these missions himself. His labors were incessant; day and night, winter and summer, he visited his flocks, and knew every Catholic family. He also made a number of conversions. ther excessive heats, nor paralyzing cold, nor storms, nor snows, nor frozen rivers, nor destructive floods impeded his apostolic labors. His name became famous in the land. Twice he refused the mitre, preferring labor, thirst, hunger, and sufferings to the honors of the purple. He was a rigid disciplinarian, but the few harmless eccentricities he manifested marked rather the strength of his zeal without marring the symmetry of a noble character. His severities were united with untiring charities and tenderness of heart. Of him it was said that, "If he had possessed a heart of gold he would have given it to the unfortunate." But he gave the poor a heart more precious than gold-a heart of grace, and love, and charity. For nearly half a century he labored for the best and highest good of his fellow-men. He died on May 6, 1840, universally honored, lamented, and venerated.

How different are the outward or apparent causes leading to conversions to the Faith. Shifting our researches now to Virginia, we will relate a conversion different as possible from the preceding cases, mysterious yet benign, and one which, however, has this in common with them, that the great mission of the Church was recognized as the teacher of truth and channel of grace. Were the facts not vouched for on unquestionable evidence, they would be incredible. But there is also a significant lesson in this instance. a warning that no one, in the case of a dying human being, should deny the services of a minister of religion to any one asking for them in extremis, whatever may be the relations of the survivors to the departing one. About the year 1790 a well-to-do and intelligent farmer, Adam Livingston, moved with his entire family from Pennsylvania, and settled near Middleway, in Jefferson County, Va. He belonged to the old Dutch stock of Pennsylvania, and was a Lutheran in faith. In Virginia, by dint of industry, honesty, and thrift, he acquired a valuable estate, and he and

all his family were worthy people, being honest, kind, hospitable, and moral. It happened that on one occasion a poor Irish Catholic was taken ill near Mr. Livingston's house, while travelling through the country, and was most generously taken into his residence, and there received from him and all his family the most tender care and nursing; yet, after all, he died in their arms, and was reverently buried. But there was one request made by the dying man which not one of the Livingstons would grant. He asked, just before his death, that a Catholic priest should be sent for. Possessing, as they did, every natural virtue, this Lutheran family had been educated in the belief that Catholic priests were monsters, the emissaries of Satan; that they had horns on their forehead, like their master, and would bring disaster on a Christian household. From their standpoint they thought they were doing a charity to the poor man, dying in their home, by refusing his request, for the Livingstons were never known to do an unkind or an unjust act. Still, their refusal was against natural justice. But, strange to relate, Mr. Livingston, so far from escaping the machinations of the devil by refusing to send for a priest for the dying Catholic, soon afterwards began to experience the most distressing persecutions from countless devils. By some unknown means his barns and granaries were burned to the ground, his horses and cattle died, the family's clothing and beds were burned, or were, by some invisible hand, cut into shreds or into little strips in the shape of crescents. Even the boots, shoes, saddles, harness, were burned or cut into pieces; the burning logs of wood rolled from the fireplace across the floor of their own motion; noises the most appalling resounded in their ears; their furniture and crockery held high carnival in dancing, jumping, and crashing together and breaking to pieces. Sleep became impossible, the food was dashed away from their mouths at table, and every torture was inflicted upon them. The whole family were reduced to the stage of extreme nervous and physical illness; the neighborhood was horrified, and no amount of sympathy could relieve their sufferings. Mr. Livingston sent for ministers of different Christian sects, and, failing of relief, he even sent for conjurors; but their presence only provoked greater outrages from the satanic powers in possession, and the ministers were driven by invisible furies from the house. Visitors from near and far went. from sympathy or curiosity, to visit the Livingston house, and all returned with their clothing clipped to pieces. When a very small boy, at Washington, which was not far from the scene of these wonders, the present writer and his parents had friends and visitors frequently in their house who had visited the Livingston house, and who related their confirmatory experiences and observations.

Father Gallitzin related that an old Presbyterian lady went with others to see, and, before entering the house, she carefully took her new silk cap from her head, and folded it in her silk handkerchief, and carefully put it in her pocket, determined, at least, to save that; but when she came out of the house and took out her silk cap to replace it on her head, she found it cut into little crescents. I have heard my mother relate that an Indian, wrapped in his blanket, sat for a moment on the door-sill, and, when he arose, his blanket fell in shreds at his feet. Finally, Mr. Livingston, who had never seen a Catholic priest, saw in a dream a beautiful church, and, on entering it, saw a venerable man dressed in vestments, such as he had never seen, and he heard a voice saying: "This is the man who will bring you relief." After relating his dream to his family and many of his neighbors he finally met a person who, to his amazement, informed him that the dress he saw in his dream was such as was worn by Catholic priests in church. hortations of his family and neighbors to send for a Catholic priest were strenuously resisted by him. Finally, finding his miseries increase, he yielded, and travelled some distance to the nearest church, and on the following Sunday attended Mass. As soon as the priest appeared in the sanctuary robed for the service, he exclaimed aloud, in the hearing of the congregation, "This is the man I saw in my dream!" After Mass, accompanied by Mr. Richard McSherry and Mr. Minghini, members of the congregation, he besought Father Cahill, with tears, to go to his house; and after much entreaty the incredulous priest reluctantly went with him to the infested house. As soon as Father Cahill entered the Livingston house, he saw and heard the proofs of Livingston's story, which he had disbelieved, and he immediately sprinkled the house with holy water, knowing Satan's dislike for it; whereupon the disturbance ceased for a time, and as he left the house a purse of money long missing was mysteriously laid at his feet for the family. In the summer of 1707. Father Gallitzin was relieved of his laborious mission that he might visit the Livingston house, and he went there perfectly incredulous. He remained from September until Christmas, making a thorough investigation; and he too recorded his conviction of the reality of these diabolical proceedings. troubles of the Livingstons having commenced again, Father Gallitzin determined to resort to the exorcism of the Church, but such were the noises he heard, as of rolling wagons, that he could not be heard; and he was overcome with nervous exhaustion from the struggle. But, when he called in the stronger man, Father Cahill, the religious exercises were resumed by the two priests, and Mass was said in the house. Now in obedience to the voice of the Church, the demons departed, the Livingstons had no more

trouble, and in their stead a sweet and gentle voice was heard to instruct and console them, and it remained with them for many years. Father Gallitzin also received from a gentle and unknown voice a remarkable and prophetic account of his future life, which he lived to verify. The Livingstons received a visit from an unknown youth, who fully instructed them in the Catholic religion. and who said: "I come from my father and I go to my father." Bishop Carroll, Father Gallitzin, Father Cahill, Father Brosius, Father Pellentz and other clergymen, visited and examined Mr. Livingston, and were convinced that he had been instructed supernaturally in Catholic dogmas. It is needless to say that Mr. Livingston and all his family became devout members of the Church. The Rev. William McSherry, S. J., who was president of Georgetown College from 1837 to 1840, repeatedly related the above facts, as he had received them from his father. Richard McSherry, who was an eve-witness of them.

[Its length here cuts our article short; but accounts of other eminent converts, and a statement of their writings, will be given in our next number.]

RICHARD H. CLARKE.

THE AGE OF THE HUMAN RACE ACCORDING TO MODERN SCIENCE AND BIBLICAL CHRONOLOGY.

PART II.

THE ANTIQUITY OF MAN ACCORDING TO GEOLOGY AND CLIMATOLOGY.

HE ancient peoples of the Orient, as we saw in our last article, were one in asserting for themselves a venerable antiquity. Not content with tens of thousands, many of them demanded hundreds of thousands of years as the period of time covered by their annals. They were likewise a unit in claiming descent from gods and demigods and in attributing godhead to all of their earlier rulers. Many, if not all of them, were firm believers in a golden age, an age of justice and happiness, which distinguished the first era of the world's history from all subsequent periods, and placed the beginnings of humanity on a much higher plane than our race has since been able to attain. "Then," says Hesiod, in his "Works and Days," "without chagrin or disquiet, exempt from labor and sorrow, men lived like gods. Infirmity, the companion of old age, was unknown. Enjoying, even in advanced years, the pleasures of youth, death to them was but as a sweet sleep. A fruitful earth furnished spontaneously the most delicious fruits, and the abundance thereof removed all occasion of envy. The peaceful and voluntary occupation which they found in providing for their daily needs removed the tedium of leisure and the weariness entailed by idleness."1

The golden age, in which we may see a faint recollection of the Garden of Eden, was followed, in the order given, by the ages of silver, brass, bronze, and iron. The last was the worst of all, and was marked by sorrow and suffering and misery, ills which in the earlier ages, were unknown.

Modern science also, especially geology and prehistoric archæology, makes great demands on time, as well as on our faith, in its teachings regarding the age of the human species. But in marked contrast with the tenets of the ancients concerning the origin and primitive condition of mankind are the views entertained on the same subjects by the majority of our modern scientists and "advanced thinkers." Instead of ages of gold, silver, brass, bronze,

¹ Cf. Ovid's Metamorphoses, lib. i.

and iron which were supposed to characterize in the order named, the beginnings of humanity, prehistoric archæology tells us we must substitute ages of stone, bronze, and iron. According to the sages of antiquity,—and they gave but a dim reflection of the Biblical teachings on the subject,—the earliest inhabitants of the earth were a more perfect race of men than the world has since known. But they fell from their high estate, and degenerated into degraded sons of once noble sires. Modern scientists hold an opposite view. The history of humanity, they tell us, is not one of degeneration, but of development; not one of descent from a higher plane, but of ascent from a lower; not one that makes mankind of noble lineage, as we have long been wont to believe, but one that declares the species to have had a far humbler and a more ignoble beginning. We are not of

"Adam the goodliest man of men since born his sons,"

but the descendants of some speechless pithecanthrope,—alalus, Haeckel calls it,—or some tailless, narrow-nosed ape, that lived and disappeared untold æons before the advent of the traditional ancestor of our race.

If we are to credit geologists and archæologists, the time which has elapsed since the appearance of the first man on earth is a very variable quantity, for no two persons have yet been able to agree upon the precise number of years to be assigned as the age of the species.

Le Conte, in concluding his discussion of the antiquity of the human race, says: "We have, as yet, no certain knowledge of man's time on earth. It may be 100,000 years, or it may be only 10,000 years, but more probably the former than the latter." M. Mortillet, one of the founders and chief representatives of the new science of prehistoric archæology, is more positive in his statements. "Man," he says, "appeared in Europe at the commencement of the Quaternary age, at least 230,000 or 240,000 years ago." These figures are nearly the same as those given by Lyell and Lubbock, who estimated the age of the human race to be about a quarter of a million years.

Büchner, although less definite, is not less positive about the great antiquity of man. He regards it as perfectly certain "that the known historical period is a mere nothing, in point of time, when compared with the periods during which our race has actually inhabited the earth." According to A. Laugel, whom Büchner quotes with approval, modern science has thrown back "the origin

¹ Elements of Geology, p. 570.

² Le Prehistorique, p. 628.

³ Man in the Past, Present and Future, p. 43. English Translation.

of man to a period so distant that, in comparison with it, our written history appears like a passing moment in a series of centuries, which the mind is unable to grasp."

But it was reserved for the notorious professor of Jena, Ernst Haeckel, to settle for once and for all any doubts that the Darwinian school of science might still entertain regarding the antiquity and origin of the human race. In his "History of Creation," after referring to the researches of some of his compeers, he declares that "The numerous and interesting discoveries presented to us by these extensive investigators of late years on the primeval history of the human race, place the important fact, long since probable for many other reasons, beyond a doubt that the human race, as such, has existed for more than twenty thousand years. But it is also probable that more than a hundred thousand years, perhaps many hundred thousand years, have elapsed since its first appearance." 1

The professor, however, is not satisfied with this simple but vague statement. As if guilty of some great blunder in underrating the antiquity of man, he hastens to correct himself. He remembers that he is the hierophant of Monism, and that according to the theory of Evolution of which he has always been an ardent champion, there never was, properly speaking, a first man. The countless transformations, extending through long geological eras, which resulted in giving to one or several animals, whose environment was specially favorable, the distinguishing characteristics of the human species, were so insensible that it is impossible not only to fix the date of the apparition of man, but also equally impossible to predicate of any given individual that it was the first representative of humanity in its last stage of development. He therefore tells us, unambiguously, that the evolution of our race from the lower forms of animal life "took place so slowly that we can in no wise speak of the first man."

"Now," he continues, "whether we reckon the period during which the human race, as such, has existed and diffused itself over the earth, as twenty thousand, a hundred thousand, or many hundred thousands of years, the lapse of time is in any case immensely small in comparison with the inconceivable length of time which was requisite for the gradual development of the long chain of human ancestors."

And the professor is good enough not to leave his readers in ignorance regarding the genealogy of man, and the processes which obtained in his development from the lower forms of animal life. All is clear to him, and he is desirous of giving others the benefit

¹ Vol. ii., p. 298.

of at least the reflected light of his brilliant intellect. He exhibits a genealogical tree of twenty-two parent-forms which, he assures us, "may be regarded, with more or less certainty, as the animal ancestors of the human race, and which must be looked upon as, in a sense, the most important stages of evolution in the long evolutionary series from the one-celled organisms up to Man." But he would not have us infer that the twenty-two types he gives us afford the complete pedigree of the human species. Far from it. He is very explicit in stating that, "the number of species, or, more accurately, form-stages, which are distinguished as 'species,' must, in the human ancestral line, in the course of many millions of years, have amounted to many thousands; the number of genera to many hundreds."

The original ancestor of our species, according to Haeckel's teaching, was a simple moneron, a small particle of structureless protoplasm, a creature of primitive slime or plasson. This moneron, which actually stands "on the very boundary between organic and inorganic natural bodies," Haeckel is frank enough to tells us, is like that "most remarkable of all monera," the Bathybius Haeckelii, discovered and described by Huxley, in 1868, and named after his friend, the professor of Jena, and the fantastical author of "Natürliche Schöpfungsgeshichte." To this last statement we give our cordial assent, especially in view of the fact of its ignominious fate at the hands of the eminent Catholic geologist, M. de Lapparent,2 who showed that its reputed existence was a myth; and in view of the further fact, that the inventor of this missing link between the inorganic and organic worlds was obliged, in the presence of the British Association for the Advancement of Science, assembled at Sheffield, to admit that what he had heralded forth to the world. with a great flourish of trumpets, as the long sought-for primal form of organized matter, was, in reality, nothing more than a simple precipitate of sulphate of lime.

From Haeckel's moneron, "the infinitely long series of slowly and gradually differentiating animal forms," finally attained to the amphioxus, from that to the primeval fish, from the primeval fish to the first mammal, and again from the latter to man." This development of our species from the original speck of protoplasm which, away back in the Laurentian period, spontaneously evolved itself from a 'few favorably collocated atoms of carbon, oxygen, hydrogen and nitrogen, was, as might be expected, a slow process. Hence, we are informed, that "the organic history of the earth must not be calculated by thousands of years, but by palæontological and geological periods, each of which comprises many

¹ The Evolution of Man, vol. ii., p. 42.

¹ Revue de Questions Scientifiques, January, 1878.

thousand of years, and perhaps millions or even milliards of thousands of years." 1

It is true, that the high-priests of evolution or transformism are not at one as to some of the details of man's genealogy. Vogt traces our pedigree, in its earlier stages, through the annelids and earth-worms. Haeckel demurs to this, and affirms that at this stage of development our ancestors were ascidians and amphioxi.

But, however much evolutionists may disagree as to details, they are unanimous in asserting the animal origin of man. To bridge over the chasm between brute and organic matter, they invented the monera, which resulted from a fortuitous concourse of certain atoms of hydrogen, oxygen, carbon, and nitrogen. The nearest living analogue of this primitive form of protoplasm is, Haeckel assures us, the ill-starred bathybius of Huxley. To bridge over the chasm between the irrational and the rational, between animals and man, they invented the anthropoid, or the pithecanthrope, the speechless man-ape, of which, like so many other links in Haeckel's genealogical chain, there is not the slightest trace in geology or palæontology.

Juvenal ridiculed the credulity of those who believed that Mount Athos was sailed through of yore:

Velificatus Athos

but how much more deserving of the satirist's derision and invective are the fantastic teachings of those who declare that brute matter can of its own motion bridge the chasm that separates it from sentient and conscious beings! Truly, "beyond all credulity is the credulousness of atheists who believe that chance could make the world, when it cannot build a house."

But the theory of descent advocated by the evolutional school of science requires the existence of these links, and we are told to look to the future for their discovery. This is about as satisfactory as Haeckel's defence of spontaneous generation, which is one of the prerequisites of his hypothesis. Spontaneous generation, in spite of the crucial experiments of Pasteur, is, Haeckel assures us, still going on, but at the bottom of the deepest oceans, and in other places to which access is barred to the investigator. Similarly, man, as man, as well as the all important missing link—alalus—had his origin in Lemuria, an imaginary continent now at the bottom of the Indian Ocean, far out of reach of the modern fossil-hunter; and thus we shall forever be denied the privilege of looking upon any of the relics of our venerable ancestors, or of their immediate progenitors, a race of catarrhine apes long since extinct.

¹ History of Creation, vol. ii., p. 337.

Mark Twain, in his "Innocents Abroad," laments the absence of a monument to the memory of our common ancestor—Adam, something that the world, for some unaccountable reason, seems to have lost sight of until its attention was directed to the matter by the great American humorist. Haeckel seems even more solicitous about the memory of the primitive plasson—the Bathybius Haeckelii—from which, he will have it, humanity is descended. According to the professor of Jena, we are indeed an ignorant and ungrateful offspring.

And yet these advocates of the animal origin of man are proud of the favored mud-fish and of the ambitious sea-squirt to which they trace back their ancestry. This is not a libel on them because they take pains to inform us of the fact. "It is better," says Claparède, "to be a perfectionated ape than a degenerate Adam." To this sapient utterance of the Swiss naturalist, Haeckel, Vogt, Büchner, and their disciples say "Amen," and all further discussion is pronounced impertinent.

But a little reflection will teach us that the Monists, or Transformists, whose views we have been considering, have "method in their madness." They assume evolution, in the sense in which they teach it, to be true, and to rest on an impregnable basis of fact. They assume also that matter is eternal, because science, by which they mean physics, can tell us nothing, because it knows nothing, of creation. They pin their faith to spontaneous generation because their theory demands it. "If we do not," says Haeckel, "accept the hypothesis of spontaneous generation, then at this one point in the history of development we must have recourse to the miracle of a supernatural creation." But this is something that cannot for a moment be admitted. For the professor of Jena continues: "To me the idea that the Creator should have in this one point arbitrarily interfered with the regular process of development of matter, which, in all other cases, proceeds entirely without his interference, seems to be just as unsatisfactory to a believing mind as to a scientific intellect." Carl Vogt endorses these views when he declares: "There can be no doubt that Darwin's theory ignores a personal creator, and his direct interference in the transformation and creation of species, there being no sphere of action for such a being." The notorious French Darwiness, Madame Clemence Royer, proclaims the same doctrines with even greater crudeness and barbarity. With her, creation is impossible, contradictory, unimaginable, and the Creator-"the absolute" is her word—has no existence, but is simply the last term of regression of an order purely logical, which does not correspond to any ob-

¹ Op. cit., vol. i., p. 349.

jective reality.¹ In lieu of a Creator, Virchow tells us "the process of life, both in its beginning and in its repetition, must be referred to a special kind of mechanics." For we must understand that "at a certain period of the earth's evolution unusual conditions supervened"; that "a thousand circumstances, which we are now unable to produce," existed; that under such conditions and under such circumstances certain "elements entering into new combinations, in statu nascente, assumed the vital movement, and thus the ordinary mechanical conditions were formed into vital ones."²

But the truculent Büchner, impatient of such euphemistic phraseology, expresses himself more bluntly, if not more positively. "The belief in God," he tells us, is a creation of "the uneducated human mind" arising "from defective knowledge of the laws of nature,"—a disposition on the part of man to refer what he cannot explain in a natural way to an invisible, mysterious cause. "Science," he affirms, "is a continued struggle with this notion, and with every step she makes forward she drives back the belief in supernatural forces, or the need of such belief, into more remote and untenable positions. Hence every science, and especially every philosophy, that seeks reality instead of appearance, truth instead of pretence, must necessarily be atheistic; otherwise it blocks up against itself the path to its end, the truth. As soon, then, as in a philosophic book the word "God" occurs, except in criticism or reference, one may confidently lay it aside; in it will be found nothing capable of promoting the real progress of knowledge. In properly scientific works the word will seldom be met with, for in scientific matters the word "God" is only another expression for our ignorance." Hence, says the blasphemous Carl Vogt, "we must dismiss the Creator without ceremony, and not leave any more the least place for the action of such a being."

Here, as in our preceding paper, we see Rationalism run wild. With Strauss and his school it issued in Atheism and Nihilism; with the leading German Transformists it results in Monism and an explanation of the universe by a "special system of mechanics."

But whether the subject of study be philosophy, theology, science, or Sacred Scripture, the object of the Rationalist is ever the same,—to minimize the supernatural, or to relegate it, as the outgrowth of ignorance and superstition, to the domain of myth and fable. Anything, therefore, that refers directly or indirectly to God or religion; anything that bears on the authenticity of the

¹ Origine de l'Homme et des Sociétés, p. 6.

Büchner, Force and Matter, pp. 176 et seq.

⁸ Man in the Past, Present and Future, p. 329.

Bible or the integrity of Christian dogma; anything that will tend, even by implication, whether by distortion of facts or suppression of the truth, to cast discredit on the traditional teaching of the Church, or shake the faith of her children, is eagerly seized on, as if the highest act of virtue and the sole end of science were to banish forever from the minds of men the very idea of God.

That which M. Gustave Flourens wrote, the scientists of the Monistic school imply, if they do not express it in words: "Our enemy is God! Hatred of God is the beginning of wisdom. If men would make progress it must be on the basis of Atheism." 1

From what we have already seen, and from what we shall learn in the sequel, the subject of the antiquity of man is one that has been particularly grateful to the skeptics and the scientific Atheists of our day. They fancy they see in the disproof of the Scriptural chronology a condemnation of the traditional teachings regarding the Adamic origin of the various races of the human family, if not a demonstration of the falsity of the entire Bible as a divinely inspired record. A certain class of geologists and prehistoric archæologists, especially, have taken this view of the question, and hence have bent their best energies to show that the teachings of their science are utterly irreconcilable with any of the accepted systems of Biblical chronology, and would now have us believe that they have succeeded without peradventure in their purpose. They display the animus that actuates them in their investigations by their inability to refrain from giving frequent expression to their contempt for the Inspired Record and for those beliefs which have so long been the solace of many millions of our race. This is particularly so in the case of the question under discussion. They affect to be surprised that any one endowed with ordinary reasoning power, or the faculty of weighing the simplest kinds of evidence, should any longer find anything in Scriptural chronology to claim his assent, or to stand in the way of his unreserved acceptance of the prevailing teachings of the evolutionary school of geology and anthropology regarding the age of human kind.

We have been thus explicit, in what precedes, in exhibiting the character, views, and methods of the modern scientists from whom we have quoted at some length, in order that what shall follow may appear in its true light, and in order, too, that the reader may appreciate the nature of the pressure that is brought to bear on many votaries of science, who have no sympathy whatever with the principles of the Monistic and Atheistic school which we have been considering. Without these prefatory observations it would

¹ Quoted by W. S. Lilly in The Great Enigma, p. 68.

be impossible to understand the attitude of contemporary geologists and prehistorians, of those, even, who make profession of Christianity and belief in the Book of books as a divinely inspired record, regarding the question of the antiquity of man in its connection with the reputed teaching of the Bible on the subject.

What, then, does modern science—and by this term we mean conservative, veritable science, and not wild hypothesis and fantastical speculation—teach concerning the age of mankind? What answer has geology, and that newer science, prehistoric archæology to give to a question which has excited such interest and received such attention during the last third, we might say during the last half, of a century? What is the nature of the evidence offered in elucidation of this much vexed subject, and what is the value of the testimony by which the case is to be adjudicated? What kind of chronometers do geologists and archæologists employ? Are they reliable, or are they utterly lacking in all the elements of certitude? What are the criteria by which we are asked by scientists to be guided in arriving at a conclusion respecting this all-important problem, and are they of such a character as to command the assent of one whose reason tells him that he must be governed in his researches by at least the ordinary laws of dialects? Let us see.

The evidence usually adduced in support of the great antiquity of man is based on observed geological and geographical changes, on changes in climate, on changes in the fauna, and on changes in the objects and implements of human industry, which have taken place since man's appearance on earth.

One of the indisputable facts, it cannot be gainsaid, of geologic science, is the fact of the very recent origin of our race. Man, according to the almost universal teaching of geologists and archæologists, did not appear before the opening of the Quarternary Age. But this age, whatever may have been its duration in years, is conceded on all hands to have been incomparably shorter than the various ages that preceded it.

Some decades ago, it was thought by many—among them by the learned French archæologists Abbé Bourgeois and Abbé Delaunay—that man existed during the Tertiary Age. Thence the long and heated discussions about Tertiary man, who, a few years ago, occupied such a prominent place in periodical literature. The question has lost the interest which it formerly possessed, although there are not wanting, even now, prominent men of science who believe, or affect to believe, in the existence of Tertiary man. The evidence, however, in support of the theory that man existed before the Quarternary Age is so slight and inconclusive that even those whose preconceived notions would incline them to favor the theory

of Tertiary man, are forced to declare that we must await further light on the subject before a final decision is warranted.

But, truth is, the death-blow to Tertiary man, at least in France, was dealt by the Scientific Congress held at Blois, in 1884. the conclusion of a long and heated debate, and after a visit to Thenay, where Abbé Bourgeois had discovered, in 1863, his alleged relics of Tertiary man, and a thorough examination of the flintflakes that had been imagined to be of human handiwork, the section of anthropology, composed of forty members, declared, with only one dissenting voice, that the proofs in support of the learned Abbé's theory were entirely inadequate. It is true that even after this, M. Mortillet insisted that if the flints of Thenay were not the products of human industry, they were at least the work of some intelligent creature. So convinced is he of this that he does not hesitate to ascribe them to an imaginary being whom he burdens with the name of Anthropopithecus, who, he will have it, was man's immediate predecessor, and the missing link for which geologists and archæologists have so long been seeking. But M. de Mortillet, if not alone with his anthropopithecus, has but a small following; for, as far as any evidence goes, his pretended precursor of man is fully as mythical as Tertiary man himself.1

But if man did not live during the Tertiary Age, it is quite certain that he was contemporary with many species of animals that are long since extinct. He, therefore, existed during one of the geological periods, properly so called—the Quaternary—because the Recent period, as understood by geologists, was not ushered in until the disappearance of the animals now found in a fossil state. In this connection it may be observed that a fossil, in scientific terminology, is any organic body buried in the earth at a period preceding the so-called Recent period in which we now live. But the existence of man during the Quaternary Age does not, as has been so often stated, presuppose for him a greater antiquity than is consistent with a legitimate deduction from the chronological facts of Scripture. The truth of this statement will appear as we proceed.

Among the geological and geographical evidences advanced in support of man's great antiquity are those supposed to be afforded by alluvial deposits, peat-bogs, stalagmitic formations, and by oscillations of the earth's surface.

¹ Cf. Appendix by H. W. Haynes, in Wright's Man and the Glacial Period; "La Question de l' Homme Tertiare," by Abbé Bourgeois, in the Revue des Questions Scientifiques, 1877; "L' Homme Tertiare," in the same Revue, January, 1889, by Abbé Arcelin. See also "L' Homme Tertiare," in the Dictionaire Apologetique de la Foi Catholique, per Abbé Jaugey, and chap. ii., of Abbé Hamard's admirable work, L' Age de la Pierre et l' Homme Primitif.

In various parts of Europe and America, not to speak of other portions of the globe, relics of man and of human industry have been found entombed at various depths in layers of clay, sand and gravel, which have been deposited by flowing water. In deposits made by rivers and streams it has been contended, and, at first sight, quite naturally, that all that was necessary to determine the age of human remains in fluviatile detritus was to find the average rate of deposition per annum. Thus, if an arrowhead or a stone hatchet were to be found in an argillaceous stratum at the depth of five feet, and it were known from a number of observations that the mean annual rate of sedimentary accumulation was one inch per annum, the inference would at once be drawn that such implements were left in the place where they were found, sixty years ago. Such reasoning would be perfectly just if we could be certain that the same conditions obtained throughout the entire sixty years as during the period of observation.1

If there were a question of only sixty years, as in the instance given, there might not be much room for doubt. When, however, there are thousands and tens of thousands of years to be considered, the case assumes a new phase. Then the uniformitarianism, of which Sir Charles Lyell was such an ardent champion, makes greater demands for our acceptance than the known facts of geology and physical geography will justify. For we know as a fact that the rate of fluvial deposition is far from being the same in different times and places; that in France, for instance, it was far greater during the first centuries of the Christian era than it has been at subsequent periods. This is demonstrated so plainly, both by history and archæology, that it is incontestable.

To give but a single case: the waters of the Somme, according to M. de Mercy, who made a special study of this river, were, during the Roman period, fully fifty times as abundant as they are now. During the Quaternary Age the deposition of alluvium must have been far more rapid than at any time since. In consequence of the great humidity of the atmosphere, the precipitation was then ten or twenty times as abundant as it is at present. Indeed, so exceptionally active, during the Quaternary period, were the agents of erosion and transportation that nothing which we may now witness can give us an adequate idea of their power and violence unless it be an occasional torrential storm in the tropics

¹ So difficult, indeed, is it to make any calculations worthy of acceptance regarding the rule of formation of fluviatile deposits that a distinguished scientist, in referring to the chronological supputations based on the monuments buried in the valley of the Nile, does not hesitate to assert that a "Fellah, who makes a dam around the lower end of his field, can, in one year, introduce a few thousand years into the cleverest calculations of a European savant."

² De Lapparent, Traité de Géologie, p. 1283.

or a destructive cloud-burst in the mountains. For-this reason alone, not to speak of others, we can declare with certainty that none of the remains of man thus far discovered in the alluvium of either Europe or America, can be produced as proof that the age of the human race is other than that which is indicated by the chronology of the Sacred Record.

The peat-beds of the Old and New Worlds have likewise been appealed to as chronometers for settling the question of the age of man, at least in the localities which have yielded undoubted human remains.

But here, as in the case of alluvial deposits, we are confronted with a fundamental difficulty—that of estimating the growth of peat-formations. The most divergent results have been arrived at by different investigators, varying greatly according to the localities studied.

According to Lyell, the rate of growth of peat is of extreme slowness. M. Boucher de Perthes, as the result of his investigations, came to the conclusion that it was not more than four centimeters per century. Having found in the Somme valley specimens of Roman pottery, sixty centimeters below the surface of a peat-bed eight meters in depth, he calculated that the time required for the formation of the peat, assuming that the pottery was fifteen hundred years old, was no less than twenty thousand years. The error in the computation was, in assuming that it required fifteen hundred years for the growth of the peat overlying the pottery. The time demanded may have been, and undoubtedly was, far less From what we know regarding the rate of peat formation in other places, there is no reason for believing that the time actually consumed in the growth of the peat above the pottery was more than two or three centuries at most. Boucher de Perthes assumes as known what in reality is a totally unknown quantity, and hence his supputations are vitiated and count for naught.

In America, according to Andrews, peat is formed at the rate of twenty to twenty-five inches per century—from twelve to fifteen times as rapidly as was imagined by Boucher de Perthes. In Ireland it has been known to grow at the rate of two inches per annum—more in one year than the French savant allowed for a hundred. In view of these and other facts of similar import, M. Rioult de Neuville, an acknowledged authority on the subject, does not hesitate to assert: "It seems proven that, under favorable circumstances, the thickest peat-bogs may have formed within a period of time not exceeding one or two centuries, and in those places even where, in our day, for lack of the conditions essential to its development, it is no longer produced." For this reason, therefore, we are fully warranted in rejecting entirely the exagger-

ated statements of Lyell and others regarding the length of time required for the growth of peat, and substituting hundreds for the thousands of years their calculations demand. Even geologically speaking, peat is of very recent origin, and it is quite futile to attempt to deduce from any human relics found in it, an argument for the great antiquity of man, or against the Biblical chronology.

In the stalagmitic deposits of certain caves, especially in Europe, have been found human remains associated with those of animals now extinct. These relics have long been thought to indicate a great antiquity for our race, but the reasoning by which this conclusion is arrived at is fallacious, for two reasons: First, because it assumes that the extinct animals, whose fossil remains are found alongside those of man, existed at a much earlier period than the facts of the case will allow. Secondly, it is taken for granted that the rate of deposit of stalagmites in the caves in question was much slower than is known to be the case elsewhere where the conditions are not dissimilar. The truth is, we encounter the same difficulty here as in our attempts to measure time by the deposition of alluvium, or the growth of peat. Thus, according to one author, a million years were required for the deposition of the carbonate of lime on the floor of the celebrated Kent cavern in England, while according to another authority, equally competent to give an opinion on the subject, a period of a thousand years was all that was necessary.

As in the case of alluvial deposits, there is every reason to believe that the rate of formation of stalagmites during the Quarternary age was much more rapid than it is at present. There was then more moisture in the atmosphere, and consequently a greater abundance of water percolating through the limestone formations in which the caves are found. The natural result, under such conditions, would be that quite thick deposits of calcareous matter would be formed in a comparatively short time. Visitors to the Yellowstone National Park know how rapidly, at the Mammoth Hot Springs for instance, calcareous and siliceous deposits are made. Objects placed in these waters are heavily incrusted in a few days. The conditions here are, it is true, exceptionally favorable, but it would be rash to assert that they were not equally favorable in some of the caves in which human remains have been found, and which belong to the Quarternary or even to the Recent period.

For this and other reasons, we declare with de Lapparent, that there is no foundation whatever for "generously distributing among the different phases of the Quarternary epoch the hundreds and thousands of centuries," as has so long been the vogue of a certain school of geologists. And, contrary to the findings of this

same school of geologists, we are unable to see in any of the fossil cave-men, or other human remains, found in the caverns of Europe. any evidence whatever for that fabulous antiquity of the human race that has so often been claimed for it. Nothing, to our mind, has yet been discovered in any of the caves that in the slightest degree tells against the teachings of scriptural chronology regarding the age of our race. We may concede to the remains of man found in the drift, in caves and peat-bogs, an antiquity of three or four thousand years, but, so far, we have no irrefragable evidence of such antiquity. We may admit, even, that cave-mentroglodytes they have been called -existed in Europe three or four thousand years B.C., and still they would have been posterior, according to a chronology that we may accept, by a thousand years to colonies established by the descendants of the patriarchs along the valleys of the Nile, the Tigris, and the Euphrates, and probably, also along those of the Ganges, the Indus, and the Brahmapootra.

For the sake of argument we may go yet further, If the evidence from science were forthcoming, we should have no hesitation in believing that parts of Europe were inhabited in antediluvian times. Indeed, the science of linguistics, and the existence of the Basques and Finns, who have no connection with the great Japhetite, or Aryan branch of the human family, seem to point to prediluvial migrations that may have antedated the Christian era six or seven thousand years. But until geologists and archæologists shall have produced much stronger evidence than anything that has yet been offered, regarding the age of man in Europe, we shall feel that there is little difficulty in reconciling the age of human remains found in the peat-beds, caverns and gravel-pits with the chronology of the Bible, as it is usually given for post-diluvial not to speak of antediluvian times.

Certain oscillations of the earth's crust, which have notably affected the contour of the surface of the globe, which are assumed, or, it may be, which are known to have occurred since the advent of man, have frequently been signalized as arguments in favor of a greater than Biblical antiquity of man. But here, as in the other instances which we have considered, the flaw in the argument consists in taking for granted the validity of Lyell's uniformitarian theory, and in considering as a known that which is positively an unknown, and in most cases, an indeterminable quantity. All cataclysmic action is denied, and this in spite of the fact that we have numerous striking evidences of its reality within historic times, not to consider those that obviously pertain to the domain of prehistory.

The coast-line of various parts of the world, as the reader is aware, is continually changing by reason of the elevations and sub-

sidences of the earth's crust, which are always in progress. In consequence of these oscillations, the sea at some places encroaches on the land, while at others the land rises from the sea. For this reason the coast line of France is quite different from what it was in the time of Cæsar, and for this reason too, the topography of certain parts of Southern England is quite changed from what it is known to have been a few centuries before the Christian era. According to Diodorus Siculus, the Phænicians who voyaged to Cornwall for tin, were able at low tide to transport the metal to the Isle of Wight dry-shod. Such a thing, as every one knows, would now be very far from possible. There is no doubt, moreover, that the British Isles were formerly connected with the continent of Europe, and probably too, only a few centuries before the intrepid navigators of Tyre and Sidon betook themselves to the far-off Cassiterides in quest of that all-important constituent of bronze which in their time was known to exist in large quantities only in this *Ultima Thule* of the then known world.1

Lyell, basing his conclusions on observations made along the coast of Sweden, thinks that the rate of elevation of land does not amount to more than two or three feet in a century.² Here again, true to his uniformitarian theory, he assumes that the rate of upheaval is regular and, in the long run, practically the same in all parts of the earth's surface. But such an assumption is demonstrably false. Not only is there a variation in time, but also a variation in places quite contiguous.

To cite but one instance from among many similar ones that might be adduced, illustrating the nature of the argument based on oscillations of the earth's crust, which are assumed to have taken place since the appearance of man, we shall give a typical case, often referred to, which was brought to light in Sardinia. Here, at an elevation of about ninety meters above the sea-level, products of human industry were found in deposits of undoubted marine origin. Assuming that the rate of upheaval was one meter a century, the conclusion was that man lived in Sardinia full nine thousand years ago. The calculation, however, was nullified, not only by the assumption of a regular rate of elevation of the land, but by the assumption of regularity of movement in a part of the world where earthquakes and other cataclysmic actions are of frequent occurrence. But this is not the most serious objection

¹ Wilkinson suggests that the Egyptians may have obtained tin from India or Spain long previously to this period. There does not, however, seem to be any evidence that the Phœnicians had any knowledge of the mines of India, while those of Spain, even if worked, would have supplied only a small fraction of the metal they actually used.

² Antiquity of Man, p. 58, and Principles of Geology, chap. xxxi.

urged against the computations based on the remains here found. It was discovered on a more careful examination, that the accumulations of marine shells, pottery, etc., at the height stated, were not necessarily any evidence whatever of upheaval. On the contrary, there are now the strongest reasons for supposing that these deposits are similar to the shell-mounds or kitchen middings of Denmark, and that they may originally have been at the same altitudes above sea-level as they are at present.

The cataclysmic causes of upheaval and subsidence are indeed of much more frequent occurrence, and affect much greater areas of the earth's surface than the uniformitarian school of geology would have us believe. As cases in point it will be sufficient to recall instances with which every one is familiar, and which do not date back more than a few years: of islands suddenly rising from the bed of the ocean, and as quickly disappearing; of earthquakes whose effects embraced areas of hundreds, and often of thousands, of square miles; of volcanoes whose eruptions occasioned untold losses of life and property. As special instances of an earlier date we may signalize the elevation of a considerable part of New Zealand during the night of the 23d of January, 1855, and the uplifting in Chili, in 1822, of fully 200,000 square miles of territory, betweeen the Andes and the coast, to a height of from two to seven feet; of the memorable earthquake at Lisbon in 1775, whereby no fewer than 60,000 persons perished in the space of six minutes, and whereby a large portion of the city was permanently engulfed 600 feet beneath the waters of the bay, and of the still more destructive earthquake that visited Calabria in 1783, which occasioned the death of 100,000 persons and was felt throughout the greater portion of Europe.

If such sudden and extensive changes in the configuration of the earth's surface have taken place during the short period of time of which we have a record, how many other, and even greater, changes may not have occurred in times prehistoric? And if we have such evidence of catastrophic action during the Recent Period, which all authorities admit to be one of remarkable quiescence, geologically speaking, what may we not believe of the period immediately preceding—the Quaternary—which affords so many indications, especially towards its close, of having witnessed oscillations and disturbances, by the side of which all subsequent changes were comparatively insignificant? The wonder, then, is not that the surface has undergone so many and so violent mutations since the advent of man, but rather that the revolutions experienced have been so few. Certain it is, that far from being an argument for the great antiquity of the race, the changes referred to rather corroborate the view of those who think that 5000 or

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6000 years are amply sufficient to explain all the vestiges of prehistoric man, not only in America but also in Europe.

We come now to a more interesting phase of our subject—the argument for the antiquity of man that is based on the changes of climate that are supposed to have supervened since his appearance on our planet. To do justice to this part of the discussion would require a special article, or more truthfully a special treatise; hence we must be satisfied with merely indicating a few of the reasons that have connected the age of our species with climatic changes.

The whole argument hinges on the celebrated glacial theory about which so much has been written but regarding which so little has been definitely ascertained. Men of science are not yet agreed as to the cause of the Ice Age, still less are they able to tell us how long it prevailed. More than this, those who have studied the matter most carefully are yet undecided as to whether there was one or several glacial periods. The opinions held by individual investigators depend entirely on the point of view which is taken or on some preconceived notion which has been raised to the dignity of a legitimate working hypothesis.

The theories that have been brought to bear on the subject may be divided into two classes—cosmical and terrestrial, or astronomical and geological; and of these there are nearly a dozen, all having able advocates, and all claiming recognition.

It is an indisputable fact that there has been since the close of the Tertiary Period, and probably since the apparition of man, what has been called a Glacial Period, or an Ice Age. If man did not witness the beginning of this period of low temperature and extensive glaciers and ice-sheets, it seems certain, as all geologists and archæologists acknowledge, that he lived during a portion, probably the greater portion, of the period. The interesting part of the problem, so far as it concerns our present subject, is to determine just when the Ice Age began and how long it endured.

According to the theory so ably advocated by Lyell in his "Principles of Geology," the growth and distribution of glaciers are to be attributed to the changes in the distribution of land and water over the earth's surface. As these changes must have been very great to produce the glaciation we know to have existed, and as mutations of this character must, according to the distinguished English geologist, have taken place with extreme slowness, we are asked to believe that the inception of the reign of Ice dated back several hundred thousand years at least. Glacialists, like James and Archibald Geike, tell us that great areas of Europe and North America were then "drowned in a wide-spread mer de glace," at-

taining in Norway a thickness of six or seven thousand feet,¹ and giving rise, when sent adrift into the waters of the Atlantic, to "whole argosies of Icebergs," in comparison with which those now furnished by the ice-seas of Alaska and Greenland sink into insignificance.

Croll, adopting the astronomical theory of Adhémar, attempts to fix exactly the number of years that have elapsed since the beginning and end of the last Ice Age. An estimate of this kind based on Lyell's theory is impossible, both by reason of the complexity of the problem, from a geological standpoint, and because of the utter absence of any reliable chronometer.

According to the astronomical theory, of which Croll, James Geike, and Sir Robert Ball are the chief English exponents, the cause of the Ice Age, or rather of the ice ages, because the theory supposes a succession or "groups" of them, to use Ball's term, is to be sought in the climatic changes due to the precession of the equinoxes, and to the variations in the eccentricity of the earth's orbit. To this may also be added, as a less potent factor, the variations in the obliquity of the ecliptic. Thanks to the investigations of Leverrier, Poisson, Lagrange, and other eminent mathematicians, astronomers are able to compute with great accuracy the periods of these variations, both for past and future time.

The precession of the equinoxes, which gradually alters the relative lengths of winter and summer, has a period of 21,000 years. According to the theory which ascribes glaciation to the precession of the equinoxes alone, there should be alternately, in the northern and southern hemispheres, an ice age every 10,500 years. Geologists, most competent to interpret the facts of their science, deny the existence of such a series of glacial periods, for the simple reason that they are not warranted by any evidence so far produced.

Croll, with whom Lyell and Lubbock substantially agree, seeks the cause of the Ice Age in the greater secular change occasioned by the variation of the eccentricity of the earth's orbit. This change, like the precession of the equinoxes, causes a difference in the relative lengths of summer and winter, but the difference due to variations of eccentricity are much greater than is possible by any change in the position of the line of equinoxes. At present, the difference is only seven days, the summer being that much longer than the winter, but a difference of full thirty-six days may be occasioned by variations in the eccentricity of the earth's orbit.

The period of this change is likewise much longer, and em-



¹ A. Geike, Text-Book of Geology, p. 890.

² The Cause of an Ice Age, chap, viii.

braces not only tens of thousands but also hundreds of thousands of years.

The last period of a state of high eccentricity, according to *Croll's calculations, began two hundred and forty thousand years ago and persisted for one hundred and sixty thousand years, terminating, therefore, eighty thousand years ago. greater portion of this period the winters were more than twenty days longer than the summers, and the temperature, we are told, was many degrees lower than it is at the present time. Another high state of eccentricity, that next preceding the one just referred to, embraced a period extending from about nine hundred and eighty thousand to about seven hundred and twenty thousand years ago. Both Croll and Lyell at one time assigned the Glacial Epoch to this period, but subsequently they adopted the later period, which culminated about two hundred thousand years since. With this view, Sir John Lubbock and other glacialists are in accord. And as the Glacial Period was wholly or in great part subsequent to the Tertiary Period, and as man, according to the majority of the authorities, appeared immediately or shortly after the close of the Tertiary, we are called upon by the school of Lyell, Croll, and Geike to grant man an antiquity of at least two hundred thousand years, if not more.

The conclusions arrived at by Prestwich, one of the most eminent of English geologists, are quite different from those just enunciated. As the result of a careful examination of the subject, he declares that "The time required for the formation and duration of the great ice-sheets of Europe and America—the Glacial Period—need not, after making all allowances, have extended beyond fifteen to twenty-five thousand years, instead of the one hundred and sixty thousand years, which have been claimed." He also limits the time of the so-called post-Glacial Period, or of the melting away of the ice-sheet, to from eight thousand to ten thousand years or less.\(^1\)

Mr. G. Frederick Wright, in his admirable and exhaustive work on "The Ice Age in North America," sums up in one sentence the difficulty that confronts those who would attempt to fix even approximately the date of the Ice Age. He declares that "The sum of the whole matter, so far as theory is concerned, seems to be that, as yet, we do not know what was the ultimate cause of the Glacial period.² "Everything here," as he truly observes, "depends upon the forces which distribute the heat and moisture over the land surfaces." Owing "to the general state of uncertainty as to the laws regulating the absorption, retention, and dis-

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¹ Geology, vol. ii., pp. 553, 554.

tribution of the sun's heat upon the earth, it is by no means certain that when the winters of the northern hemisphere occur in aphelion they will be colder than now. Whether they would be so or not depends upon the action of forces whose laws cannot now be accurately calculated."

The same writer deprecates the idea of geologists abandoning their own field to accept the glittering results of celestial mathematics, and favors the leaving the discussion of the theories of ultimate causation of the Glacial Epoch "to where it belongs," not to astronomers, or geologists even, but "to the more enlightened meteorologists of the future."

Referring to the theory of a succession of glacial periods, he maintains that local glaciers are amply sufficient to account for all the facts observed. Le Conte concludes a discussion of the subject with the statement: "The evidence at present, therefore, is overwhelmingly in favor of the *uniqueness* of the Glacial Epoch."² These conclusions, "with reference to Croll's theory, are those pretty generally adopted at the present time by the American geologists best qualified to interpret the facts."³

From the foregoing we learn that neither geology nor astronomy can give any answer to the questions regarding the cause, time, or duration of the Ice Age. The opinions entertained on the subject by even the ablest exponents of these sciences are most diverse, and often as contradictory as they are extravagant. Are we then to remain in complete ignorance of these matters, or may we not expect information from other sources? We think the question may be answered in the affirmative. The light, however, will not come from astronomy or geology, but rather from a more neglected but nevertheless a more reliable witness,—history. This, after all, notwithstanding what scientists may say to the contrary, is the witness that we are ultimately forced to appeal to in nearly all the difficulties that arise in discussing the much vexed question of the age of our species.

Leaving aside the question as to the cause of the Ice Age, as not relevant to our present purpose, may not history afford us at least a portion of the information we are seeking concerning the time of occurrence, and the duration of that reign of ice of which we have, both in America and Europe so many and so striking traces? As for ourselves we are satisfied that it can, and we shall briefly indicate a few of the reasons for the faith that is in us.

Many, if not the majority of those who have treated of the Ice Age have taken for granted that the temperature which charac-

¹ Op. cit., p. 427.

² Elements of Geology, p. 577.

³ Wright's op. cit., p. 439, cf.; also Upham's paper on "Accumulation of Drumlins," in American Naturalist for December, 1893.

terized this period was much lower than it is at present, or has been during recent times. Such an assumption, however, is unwarranted. M. Charles Martin has shown that a lowering of the temperature by four degrees would be sufficient to explain all the phenomena of glaciation of the Ice Period. And this diminution of temperature may be regarded as a maximum, for it is a wellknown fact, which no glacialist will deny, that moisture is even a more important factor in the production of glaciers than extreme The river beds and the alluvial deposits of the Ice Age attest the fact that this period was one of great humidity, as well as one of reduced temperature; that if it was characterized by an extraordinary extension of ice-fields in both the Old and New Worlds, it was no less marked for the great precipitation which then prevailed, and for the immense volumes of water which then coursed along channels that now convey but little water, or are at times almost drv.

It is, too, a mistaken notion to imagine that we must go way back to the dim prehistoric past to find in Europe such a condition of humidity and reduced temperature. We have history to assure us that it obtained long after the advent of man in this part of the world; that we need not go back more than fifteen hundred or two thousand years to find climatic conditions quite different from those which are now prevalent, and winters whose rigors were far greater than anything that has ever been known in more modern times.

According to Herodotus, the climate of Scythia in his day was about like that of Alaska or Labrador in our own. It, as well as the country along the Danube, was completely frost-bound during eight months of the year. The summer was characterized by torrential rains, a reminder of which we occasionally have—but at rare intervals—in those inundations that carry death and destruction before them, and which, when they do occur, are looked upon as national disasters.

Cæsar's account of the climate of Gaul, of the rigor of its winters and of the excess of its rain-falls, is the same as that given by the Father of History regarding the region of the Danube. The testimony of Varro, Cicero, Strabo and Diodorus Siculus concerning the severity of the winters of Gaul are but confirmatory of that of Cæsar. So great, says Diodorus Siculus, is the cold of Gaul in winter "that almost all the rivers are frozen over, and natural bridges are formed, over which large armies with their chariots and baggage pass in safety." Virgil and Ovid say the same thing of the glaciation of the Danube and the Euxine. Ovid tells us that not only has he seen the Danube frozen over, but that he has witnessed the whole of the Euxine covered with ice, and that he

has walked on it when in this condition. More than this; he declares, that so intense was the cold that even wine congealed and was broken in lumps when drunk. Virgil and Horace testify to the low temperature which prevailed in Italy, and picture to us climatic conditions existing in their day, as far south as the Campania of Rome and the ramparts of Tarentum, such as now characterize the winters of northern Europe.

So intense was the cold of Scythia, declares Herodotus, that the ass, one of the hardiest of animals, was unable to live there. Aristotle makes the same statement about Gaul. For a similar reason, we are assured by Theophrastus, the olive could not be raised in Greece more than four hundred stadia from the sea. And according to the testimony of both Greek and Roman writers, the arctic rigor of the climate of Gaul made it impossible to cultivate either the vine or the olive.

During the first centuries of the Christian era the climatic conditions of the portions of Europe we have named, were, according to all contemporary writers who refer to the subject, essentially the same as they were in the times of Herodotus, Horace and Ovid. It is unnecessary to indicate how much the climate has since changed, how entirely different it now is from what it was when Aristotle taught and Virgil sang. In reading the accounts left us of the former intense cold of countries where the climate is at present so mild, we can almost imagine ourselves perusing the fanciful descriptions of some of our modern geologists and archæologists descanting on the rigors of the climate of the Glacial Period, when our troglodytic ancestors, clothed in the skins of wild beasts, shivering and suffering, huddled together in damp and gloomy caverns which afforded them their only available shelter from the biting blasts of winters that lasted for the greater portion of the year.

M. Fuster, who has made a profound investigation of the subject declares emphatically that, "If there is a settled fact of history, it is that of the extreme rigor of the climate of ancient Gaul. All testimonies, all opinions, all circumstances forcibly and unanimously proclaim the intensity of its cold, the superabundance of its rains, and the violence of its tempests. It is futile to contend against such a fact by invoking the aid of false notions, or prejudices, that are wholly without foundation. Like truth itself, it is sure, sooner or later, to be triumphant." What M. Fuster here says of Gaul, can with equal truth be predicated of the other countries of Europe just mentioned; for from what we have already learned, they belong to the same category.

The change then from extreme cold to genial warmth has oc-



¹ Quoted in the Dictionaire Apologetique, p. 215.

curred within historic times. Might we not, if we had the light of history to guide us back a few more centuries, or a few more thousands of years—for even the traditional chronology allows us this time-find all the rigor of climate, all the abundance of snow and ice, and all the excess of precipitation which geologists tell us were among the distinguishing features of that portion of the Quaternary Period known as the Ice Age? Our opinion is that we should. A mean annual temperature a few degrees lower than it is at present, and a more humid condition of the atmosphere, are, as we have seen, all that is necessary enormously to augment the volume of our water-courses, and to produce those mighty glaciers, that at one time in the indefinable past wrapped extensive areas of both the Old World and the New in a deadly mantle of ice. Given a slight variation in our present thermometric and hygrometric conditions, and we should in a short time, as meteorology teaches us, witness all the phenomena of the Glacial Epoch. And such a variation would effect in a few centuries—in a few thousand years at most-all the grand mutations for which geologists and archæologists demand tens of thousands and hundreds of thousands, yea, millions of years.

In view, therefore, of these facts, and of a growing conviction which we entertain, that many of the phenomena, which modern scientists are wont to refer to the early Quaternary Period, or at least to the remote and unknown prehistoric past, really occurred within historic times, we decline to accede to the extravagant demands made by geologists and archæologists. Many, it is known, fall into error because, forsooth, they have some pet theory to support, or because, by reason of their environment, they are the victims, unconscious, it may be, of delusions and of prejudices that color all their observations, and vitiate all their conclusions. The antiquity of man may be much greater than has hitherto been supposed, but the evidence invoked from climatic changes that are presumed to have taken place since the advent of man is not conclusive. Hence of all inferences drawn from such premises, we simply and unhesitatingly say, non sequitur.

Another specious argument often advanced in favor of the remote antiquity of our race is the occurrence of undoubted human remains with those of animals long since extinct. Among the animals whose remains have most frequently been found with those of man are those of the elephant, the cave-lion, the cave-bear, the Irish elk, the cave-hyena and the reindeer. But these animals, it was contended, all belonged to the geologic past—to the Quaternary Age at latest; and hence the universally received opinion that the appearance of man on the earth antedates by far the epoch assigned for his advent by the traditional chronology.

It has long been accepted as a fact that could not be gainsaid that man was contemporary with the mammoth. Remains of this species of elephant and human relics have been discovered in many places in Europe and America—especially in Europe—in the same deposits, and so commingled that it was regarded as certain that they belonged to the same epoch. And many were the ingenious theories that were evolved to account for the disappearance of this monster of "the forest primeval," to which not the slightest allusion has been made by any record that can be regarded as authentic. In America, in Great Britain, and in various parts of Europe, bones of this giant pachyderm have been found in countless numbers. In Siberia the tusks are of such frequent occurrence as to give rise to a considerable traffic. All are familiar with the finding, in 1799, of one of these huge beasts encased in a large block of ice near the river Lena, on the border of the Arctic Ocean, and remember that the flesh was in such a perfect state of preservation that dogs and other carnivorous animals ate it with avidity.1

The mammoth, according to the majority of geologists, was regarded as the oldest of the animals coeval with man which are now found in a fossil state. Hence, as it was supposed to have disappeared some scores of thousands of years ago, man, if its contemporary, would have a very hoary antiquity indeed. Passing over the divers explanations that have been offered at various times of the difficulty raised, it will be quite sufficient for our present purpose to state that some of the ablest living archæologists deny in toto the coexistence of man and the mammoth. Among these may be signalized the distinguished and venerable archæologist of Copenhagen, J. Steenstrup, and Prof. Virchow of Berlin. The former, as the result of a critical examination of "the discoveries in Europe, which are supposed to prove the contemporaneity of man with the mammoth, reached the conclusion that not only is the evidence inadequate, but, for climatic and geologic rea-

¹ This singularly well preserved specimen of the mammoth, or hairy elephant, as it is sometimes called, is now, as our readers are aware, in the great Museum of Natural History of St. Petersburg. It is by far the best specimen of the kind yet discovered. Some years ago, during a visit to the Czar's dominions, we had an opportunity of examining it, and whilst pondering over some of the thoughts suggested by this creature of another age and clime, we addressed ourselves to the curator of the Museum, a learned German savant, well known in the world of science as one of the ablest of European naturalists, and asked him how long, in his estimation, it was since the mammoth became extinct. "How long?" quoth he, "how long? Forty thousand years, fifty thousand years, a hundred thousand years." He was not very positive about the exact number of years, as his answer indicates, but, like all the members of the school to which he belonged, he was an evolutionist of the most pronounced type; he affected to be certain that the lapse of time was to be measured by nothing less than multiples of tens of thousands of years,

sons, no such coexistence is possible." This opinion is cordially endorsed by Virchow, who, with many of the members of the German Anthropological Association, at their meeting in last August, went even further, and declared that "The Reindeer Period was the remotest to which they were willing to assign the appearance of man in Europe on existing evidence."

According to the division of geologic time here referred to, the Mammoth Period was the first subdivision of the Ouaternary Age. The Reindeer Period immediately followed. But the reindeer is still among existing animals. It did not become extinct, as did so many others that are alleged to have been contemporary with early man, but simply migrated to a colder climate. As all are aware, it is still found in large numbers in northern Europe, especially in Lapland. In Cæsar's time it lived in much more southerly latitudes. In his "Commentaries" the Roman commander describes it as one of the strange animals in the Hercynian Forest.² The occurrence, therefore, of human remains in France and Germany together with those of the reindeer, would not be evidence of the great antiquity of man, for it would not necessarily carry back the age of our race more than a few thousand years at most. And as there is reason to believe that the reindeer kept to the forests of central Europe long after Cæsar's time, we are evidently dealing with a species of mammal that belongs to the historic as well as to a geologic period.

What has been said of the reindeer may, in a measure, be asserted of the urus, cave-bear, cave-lion, cave-hyena and Irish elk. The urus is described by Cæsar, and at the time of the Roman invasion ran wild in Gaul. It has, however, long since become extinct. As to the cave-bear, there is reason to believe that it did not disappear until comparatively recent times. Certain it is that its remains have been found associated with those of some of our domestic animals. For this reason there are not wanting those who maintain, and not without show of reason, that the great bears referred to in the chronicles of the Middle Ages, were none other than the cave-bears, also remarkable for their size. of the geologist and archæologist. The documents referring to the cavelion and the cave-hyena as belonging to the fauna of Western Europe have not the same authenticity possessed by those that make mention of the cave-bear, the urus and the reindeer. But the absence of all reliable historical data regarding them is, after all, no more than negative evidence. Considering to what an extent the whole of this part of the world was, even long after the time of the Romans, an immense terra incognita, it is not surpris-

¹ Science, February 10, 1893.

² De Bell. Gall., vi., 26.

ing that these animals, like many others that are known to have existed during this period should have eluded observation, or been passed over in silence. In view of the fact that immense numbers of lions are known formerly to have frequented parts of northern Africa, where they are now rarely if ever met with, and in view of the further fact, that they existed in parts of Europe from which they have long since disappeared, far from being unlikely, it seems, on the contrary, quite probable that the king of animals, was one of the denizens of the forests of southern Gaul not only during the Roman period, but also at times long subsequent. We learn from the Greek writers that he formerly inhabited the forests of Thrace, Thessalv and Macedonia and from this and other facts of like import, we feel fully warranted in considering him as being, in Europe, the contemporary of the known fauna of the historical period. Regarding the great Irish elk-cervus megaceros-whose remains are found in so many portions of the Old World, especially in France, Great Britain and Ireland, it suffices to say that everything known about him seems to point to his extinction within historic times. Certain ancient records referring to him inform us that he was much sought after by the Romans, who had him brought from regions so remote as England.

There is, then, no valid reason for attributing to the animals named the great antiquity so frequently claimed for them. And there is, consequently, no reason for insisting on the great age of mankind because human relics have been found associated with the remains of animals that have been extinct for a long time, it is true, but not certainly during those untold ages of which geologists and a certain school of archæologists speak. surely nothing surprising in the fact that a half dozen or a dozen animals—the contemporaries of primitive man—should have disappeared in prehistoric times, when a much larger number of mammals and birds-forty or fifty species, at least-are known to have become extinct within historic times.1 The wonder is rather that the number of species that died out in prehistoric times was not far greater—that there was not a hundred or more of them considering the long lapse of time that intervened between the advent of man in Europe, and the beginning of the historical period.

In the early part of the last century the island of Rodriguez, in the Indian Ocean, was, according to the French writer, Leguat, remarkable for the number and variety and uniqueness of its fauna.² Before the close of the century, it had so completely dis-

¹ See an interesting discussion on this subject in Knowledge for January, 1893. Cf. also The Epoch of the Mammoth, chap xi., and The Recent Origin of Man, by James Southall.

² See "Adventures of François Leguat," in the Edinburgh Review, for April, 1892.

appeared that Leguat's testimony regarding it was called in question. Long subsequently, however, certain fossil remains were found in the soil, which the eminent naturalist, Milne-Edwards, showed to be the relics of the identical species described by his fellow-countryman a century and a half before. The extinction of the bison in this country, where a few decades ago it roamed over our western prairies in herds of thousands, if not tens of thousands, is an example before our own eyes, of the short space of time required for the utter destruction of a numerous and powerful species. For this and similar reasons that it is unnecessary here to multiply, we should hesitate long before attempting to base an argument in favor of the great antiquity of man on the disparition of a few species of animals that are known to have been coetaneous with primitive man, but which, for all we know to the contrary, may have lived in historic as well as in prehistoric times.

J. A. ZAHM, C.S.C.

THE PRIMITIVE CREED OF MAN.

THE oft-reiterated assertion on the part of modern infidelity that the loss of religious faith neither necessitates a loss of hope in the future nor the lack of an incentive to a virtuous life in the present, has its basis in an assumption which may not be passed unchallenged.

We are told that we have no reason to despond, even if we do find the creeds of men subject to the same laws of growth and decay which govern all things human. Men's religions, this new prophet tells us, like their temples, were builded up only to crumble away under the flight of time and the shocks of change. Good they may have been for the age and the peoples amidst whom they flourished, but they were destined to be as evanescent as life itself. The reason of their having been lay in the imperfect apprehension of man's destiny natural to the race in the years of infancy, when the painful riddle of the earth was read in the language of childhood, and the puerile imagination of primitive man construed the mysteries of life into the hobgoblins of the nursery. Such was the origin of all creeds, each developing differently according to its special environment. But now that the race is budding into the flower of manhood and beginning to attain the use of virile reason, we must expect new standards of truth, a more perfect comprehension of man's place in the universe, and a more accurate measure of his moral needs and cravings.

We are not, however, to imagine that religion is dead. It has but evolved into a higher form. The creeds of the past were the chrysalides whence, in all the splendor and vigor of maturity, emerges the completer life, discarding as an old husk, no longer serviceable, the superstitions that at first enveloped it. Instead of the immortality of the individual hereafter, is to be substituted the immortality of the race here. Heaven has at last yielded to the onslaught of the Titans, and on the thrones of the celestial hierarchies sit the vigorous sons of earth. Hell, too, has succumbed to the conquering race, and its legions, which had before waged such awful warfare upon weak mankind, have fled before the piercing light of the new dawn like the shades of night out of which they were first born. Virtue does not receive its reward in the beatitude of the blessed, nor does the iniquity of the wicked find its torments in the punishment of the damned; but each virtuous act reaps its compensation in the glad consciousness that it is a treasure laid up for the perfect enjoyment of the race in that far-off millenium of "the power that makes for righteousness." Vice stands rebuked in the pang it inflicts upon the vicious, and in the fearful knowledge that it strikes at the future happiness of mankind. To be upright, self-sacrificing, pure, for the sake of the generations to come, is the measure of man's morality. Whatever this may cost him, be it comfort, ease, luxury, nay, even life itself, still is he to persevere in the broad aspiration and illimitable hope of the incomparable bliss and glory of human kind in those dim ages of the distant future. In this, we are told, lies an incentive to virtue as much nobler, broader, higher than the stimulus of a selfish individual reward in an unknown paradise hereafter, as the life of the race excels the life of the individual in height, breadth, and depth. In this consists the sublimity of unselfishness, the topmost pinnacle of virtue, the crowning glory of the world's religions. This is to be the magnificent goal of man's noblest ambition, for only in this is to be found the end and value of life.

Such is the proposed mission of the new cult, which it seeks to dignify by the title of religion. Magnificent, brilliant, tender, human, full of fair promises, it presents itself, claiming our allegiance and our faith. It invites us forth, it says, from the crumbling ruins of our ancient temples into the sweet sunshine and pure atmosphere of humanity's creed. Its words are fair, its aspirations lofty, its hopes noble, its promises alluring, and its prospects seem to presage victory. But, in spite of the glamour of new things, there is a conservative element in man's nature which constrains him to cling to the old, and while he may regard with wondering

eyes the beauty of the scene without, he still sits under the shadow of the ancient pile builded up by the dead hands of bygone faiths. If he desert this shelter, what guarantee has he of a better without? What is the innovator's warrant of superiority? May not these promises be but a specious delusion, a glamour of enchantment to dazzle, to deceive, and to betray? Doubt arises to assail the new truth or the new pretension. Is all this true which the voice of the nineteenth century announces to us as another revelation,—this time from below, not from above? Are all creeds of the past but the vain ephemera of the moment, only lower forms, out of which is now first issuing the perfect faith? Do men who yet hold by the old still wallow with the swine amid the husks, and has humanity, amid all these thousands of years, been wandering through a desert land following cloud and fire? Are we now only entering upon the land of promise, and is this new voice as the voice of one crying out in the wilderness, prophesying the coming of the new Messiah?

In this way we are told that the past is but a stepping-stone to higher things; that it is our dead self, whence we are sprung it is true, but which having performed the function of generation has passed forever into death. Within us the life, which it has transmitted, lives new-born, and we are to nourish it upon the promise of the future. The past religions of mankind are, therefore, but empty husks, from which the living creature that once breathed in them has fled forever. It is but natural, then, to cast them aside as we would our worn-out garments. This is even our imperious duty, if it be true that the winter of death has come upon them and shriveled them root and branch.

When we gaze over the field of the world's religious history, our skepticism seems to find confirmation. It is a scene of darkness and confusion. The dissonant clamors of conflicting creeds strike stridently on the ear. It is a field of slaughter and blood, where hate rages and might seems right. In the name of truth multitudes go down before the merciless steel of conquering faiths. Amidst strife and contention the new supplants the old. It is a war of extermination, where each side claims the sacredness of its own cause. Nations and their creeds rise and fall together. Religion, like all other things human, is in a constant flux, and history seems to write upon its forehead the same legend of mortality.

Surely there can be no truth where all is constant variation. We are seeking for the permanence of truth, which alone can resist the tooth of decay. When we turn to our own faith we are told that it, too, is as fleeting as any creed of the past; that it is equally subject to the laws of growth and decay, and if it seem in our

eyes to be of eternal value, so in the eyes of bygone peoples did their creeds appear as the sole deposit of truth everlasting. If we would cling to our own, even at the price of life itself, we have only to read their history to find examples of the same tenacious hold upon what they also believed to be the one only truth. appeal to history seems to bring but one answer,—death is the end of all creeds, as of all life. What right, then, have we to expect more from our own when the golden fruit of the ancient promise has fallen into ashes in the hands of time? Is it not presumptuous to place our hope in the immortality of our own creed, however dear to us, when the history of mankind teaches us so plain a lesson to the contrary? It is in this strain that we are told that the supernatural is the superstitious; that the Christian belief in a personal God, who has given a divine revelation to mankind, may read its fate in the lesson so vividly taught us by the dead faiths of the past. Do these older creeds, in truth, force upon us this startling warning? What is the legitimate conclusion that may be drawn from their history?

When we first contemplate the varied scheme of man's religions the mesh seems inextricable. In the first moment of inquiry we naturally turn to the religious systems of Greece and Rome (which we will class as one for convenience) as of all heathen worships the creed most familiar to us. What do we find in these to serve as a clue to our problem? Our first feeling is one of utter helplessness. On every side we meet the grossest idolatry, so loathsome in its mythology that Prof. Max Muller has styled it "a period of temporary insanity through which the human mind had to pass." Their pantheons embraced gods of the most abject type, born it seems of every phantasy possible to a defiled imagination. Reason bestialized itself in the conception of such divinities, and an unclean fancy played unrestrained. In Zeus we see magnified force, endowed with all human vices and inflamed with the grossest human passions; he is cruel, revengeful, lustful, utterly regardless of all moral restraint; Hêre is a jealous virago, vindictive and quarrelsome; Athêne is merciless; Aphrodite the embodiment of sensuality, and her cult a celestial sanction of rites unmentionable: Priapus typified even lower bestial passions, and Dionysos was the divine embodiment of all dissoluteness; Phoebus Apollo knows no compassion, and Artemis is a passionless counterpart of her brother; both smite their rivals with relentless pleasure. Well might the period of Greek mythology be called an insanity of the human mind.

In spite, however, of the confusion and moral disorder that prevailed in the Olympian hierarchy, we do find a consistent meaning in Greek polytheism if we only look for it in the right direction. The Greeks inherited their pantheon, at least substantially, from a people much older than themselves. It is now an established fact that all the Indo-European races are descendants of common ancestors, whom we first know as dwellers on the northern slopes of the Hindú-kúsh range of mountains in Central Asia. To them the Greeks and Romans have been traced. If we regard the Greek pantheon apart from its source, we shall have to give up all hope of ever unraveling its confusion. But through the aid of the science of philology the secret of the polytheistic creeds of all Indo-Europeans has been unlocked, and such a flood of light thrown in upon their religious systems as to clear the else utter darkness which had gathered so densely around them. Ancient Sanskrit is the language nearest in time and structure to the tongue spoken by the Arvan ancestors of the races in question. The sacred books of the Hindus, called the Vedas, are written in this ancient Sanskrit speech. Through the assistance of philology the names of the Greek divinities have been identified with the ancient Vedic gods, and in their Sanskrit form we find their etymological signification. In the Vedas the supreme deity is called Draus, signifying, in Sanskrit, the sky, from a root, dyu, to shine. To this source the Greek Zeus has been traced. Atâna was a Vedic goddess, whose name means the dawn. In the light of this derivation how clear becomes the Greek myth of Athêne (Atanu) springing from the forehead of Zeus. It is the dawn springing from the east, the forehead of the day. The legend of Apollo and the Python and of Vedic Indra and Vritra substantially correspond; they are only a common inheritance from an older creed, and in the light of their comparative mythology mean the victory of light over darkness or the sun dispersing the shades of night. Ouranos is the Sanskrit Varuna, the all surrounding heavens. The Charites or Graces are the Harits or bright courses of the sun. The Greek Erinyes (the Furies) in their original form were the Saranyu or dawn, which brings evil deeds to light. Hêre like Zeus signifies the gleaming heaven. Aphrodite or Anadyomene, the beautiful goddess who is born of the waters, is only another image of the dawn rising in the soft glow of early morn from the billowy bed of the murmuring sea. To the Greek, as to the Hindu, she was the goddess of perfect beauty. It is thus that the Greek pantheon may in substance be traced back to Arvan sources. It is therefore. derivative in its character. In the names of the ancient Vedic deities, who are from the same primitive stock, is preserved the original signification of the Greek appellations. Through their etymology we thus arrive at their original character, and are enabled to interpret the myths that have gathered around them, like the fantastic shapes of clouds on the horizon at the rising and setting of the sun.

Therefore, to understand the Greek system in its proper mean-

ing it must be referred back to its parent stem. It is derivatively and fundamentally Aryan. The ancient Aryan religion, we discover from the Vedas, was a nature worship with the sun or sky as chief divinity, around which are grouped the deified forms of the lesser powers of nature. Sun, moon, earth, wind, storm and cloud are woven together in one diversified system, whose elements are as various as the manifold aspects which these phenomena assume during the course of day and night throughout the seasons of the year. Amongst the Arvans this nature worship was conscious, as the etymology of their divine names shows. Greeks Zeus did not mean the sky; they had long before lost the original signification of the name. But to their Aryan forefathers Dyaus had the very pregnant signification of the heaven, the Bright Shining One. Athêne had long ceased to mean the dawn to the votaries at her pagan shrine, but Atâna was truly the Bright-Dawn rising from the morning sky to our Aryan ancestors in those distant centuries before they wandered from their ancient Asiatic home. With them physical nature under its thousand and one ever-shifting aspects was the object of a conscious worship, and as long as it remained conscious their creed enjoyed that unity which is to be found in nature itself. From this conscious nature-worship of the Aryans are derived the mythologies of all Indo-European peoples, and to this same parent-stem is to be traced the divinities of the Norseman in the extreme north of Europe and the gods of the Hindu in the extreme south of Asia. As the Aryan tribes. migrated from their primitive Asiatic home westward or southward, each carried with it as a common inheritance the same religious. system of a conscious nature-worship; but as the various tribes settled in the different countries where they had sought new homes, and gradually developed into the distinct peoples we afterwards find them, they lost the ancient meaning of their creed. Diversity. of climate and location by degrees modified and expanded it into the divergent systems of mythology, which so perplexed the learned world until the light of philology came to explain them.

The polytheisms of all Aryan-descended peoples may, therefore, be justly reduced to the conscious nature-worship of their ancestors, who, looking out upon the world around them and finding the need of rendering divine homage in their hearts, fell down and adored the vast and mysterious system of nature. Not knowing, or having lost the knowledge of, nature's God, they worshipped nature itself.

Turning now to Semitic peoples, do we find in their mythologies anything to lead us to a like conclusion? Is there, as in the Semitic polytheisms, any clue to a fundamental unity by which their confusion may be reduced to order.

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Beginning with the Egyptians, whom we may class as Semitic, although it is disputed whether they are not Turanian, how shall we approach so complex a system and one which is historically the oldest in the world? The multiplicity of Egyptian divinities at first naturally perplexes the investigator. If we begin by arranging its pantheon into deities of the first, second, and third class as is usual, we shall enter upon as futile as it is an endless task, for their name is legion. Let us enumerate the principle divinities and class them according to their proper attributes. The chief deity is Osiris; second in importance comes Horus, and third Ra or Phra. In these we have the sun represented under its three principal aspects, the setting sun, the rising and the midday sun. Ranking just behind these are Pthath, the life-giving power of the sun's beams, and Mandoo the fierce force of the sun's rays at midday when they beat down most powerfully upon the scorched earth. Pasht is a feminine personification of the sun's rays, a counterpart of both Pthath and Mandoo. Then we have Com, Moui, and Koms, who are called the sons of the sun, and who reveal him and carry his messages to men. In these we have another deification of the sun's rays. In Kneph is embodied the air god or the blowing wind, and who came, in time, to signify the breath or spirit. The great night deity is Thoth, the moon; Maut. the midnight sky, brooding silently, tenderly, and calmly over the sleeping earth is the universal mother. Nu personifies the blue sky lighted up by the brilliant midday sun. The morning sky typifying vigilance and endeavor, is called Sate; and Hather, the queen of love, is the evening sky, the faithful wife of the declining sun. Isis, who is represented as the sister and wife of Osiris is the great earth-goddess, and typifies the feminine principle throughout all nature, while grouped around her are a number of lesser deities of a more or less similar character.

In the above enumeration sufficient has been shown to bring clearly before us the fundamental character of the Egyptian system. Defined distinctly in it are three classes of deities, sun-gods, sky-gods and earth-gods. Ranking first in importance are the sun-gods, who held the chief central position in the pantheon. Around these as subordinates are grouped the lesser gods of the sky and earth. Egyptian polytheism was, therefore, principally a sun-worship, and although in the process of time the Egyptians, like the Indo-Europeans, lost all conscious knowledge of the primitive character of their system under the gradual accretions of a popular mythology, their religious system must have originally taken its rise from a conscious nature-worship of the objects personified in the later divinities of its pantheon. In Egyptian myth Horus slays Typhon, as Vedic Indra pierces Vritra with his keen

spear, as the Greek Apollo vanquishes Python with his swift and unerring arrows, and as the Norse Thor conquers the Jotuns, the powers of cold and darkness.

Like the Egyptian the Chaldean pantheon exhibits the same primitive elements. It is made up of sun, sky and earth divinities, the first mentioned taking precedence. In the first triad we have Anu, the hidden sun, the ruler of spirits and a far-off city, the Lord of Darkness, the Father of the Gods. Next in order is Bil, the midday sun, the emblem of royalty, like the Egyptian Phra. The third member is Hoa, the sun's rays, Lord of the abyss, lord of the great deep, the intelligent fish, akin to the Philistine Dagon. In the second triad rank Sin or Urke, the moon-god, San the disc of the sun, and Vul the air. Following these are the gods of the five planets Nebo (Mercury), Ishtar (Venus), Nergal (Mars), Bel-Merodach (Jupiter), Nin (Saturn).

The gods of the Caanite nations, under which term we may loosely class all Semitic peoples other than the Chaldeans, Egyptians and Jews, show the same characteristics; they are all personifications of the sun or his rays. Moloch, Baal, Chemosh, Baalzebub, are the sun or his rays under fierce and malignant aspects, to whom in propitiation human sacrifices must be offered; Thammuz is the softer and gentler aspect of the great luminary of Heaven. Ashtoreth or Astarte is the moon goddess and corresponds closely to the Egyptian Isis as an emblem of the receptive or feminine principle in nature. The inference to be drawn here is the same as was concluded from our examination of Aryan polytheisms: Semitic polytheisms are derived from a primitively conscious nature-worship with the sun as chief divinity, and in the course of time degenerated into a mythological system, in which the conscious element in time was entirely lost.

If we are to regard the early inhabitants of Chaldea and Egypt as Turanian, upon whom was engrafted Semitic stock, then the evidence, which the religious systems of these nations furnish, will go to show what was the primitive form of worship among Turanian peoples. But besides this we have accessory evidence from purely Turanian sources. "Taking Chinese," says Prof. Max Müller, "for what it can hardly any longer be doubted, the earliest representative of Turanian speech, we find in China an ancient colorless and unpoetical religion, a religion we might almost venture to call monosyllabic, consisting of the worship of a host of single spirits, the sun, the storms, the lightning, mountains, rivers, one standing by the other without any mutual attraction, without any higher principle to hold them together." And he adds, "that there was not only a primitive Aryan and a primitive Semitic religion, but likewise a primitive Turanian religion, before each of

these three primitive races was broken up and became separated in language and worship and national sentiment, admits I believe of little doubt." Is this primitive Turanian religion anything like the primitive Aryan and the primitive Semitic religions?

In ancient Chinese poetry Heaven alone is called both father and mother of all things. In Chinese Tien means Heaven. the Shu-King, Tien is called Shang-Te, High-Spirit. The Mongolian Teng-Ri, sky, is the same as the Chinese Tien. Chinese historians relate that the title of the leaders of the invading Huns was Tangli-Kutu, Son of Heaven. The title of the Chinese Emperor is Tien-Ze, Son of Heaven, which means Emperor by the Grace of God, and corresponds to the Tangli-Kutu of the Mongolians. Hence the Hunnish Tang-li or Mongolian Teng-Ri are the same in meaning as the Chinese Tien, Heaven. Chinese historians also bear witness that the Tukin, the ancestors of the Turks, were worshippers of the spirits of the earth, Pu-teng-i-li. Teng-i-li is the same as the Mongolian Teng-Ri, which, as we have seen is identical with the Chinese Tien; and this again we are told is akin to the modern Yakute word Tangara, sky or God. The Tungusic supreme divinity is called Buga, sky; the Samoyedas address their chief deity as Num or Juma; the Finns as Jumala, Juma, thunder and la, place, the place of the thunder or the sky; and the same word, we are furthermore informed by philologists, occurs in a modified form among the Lapps, Esthonians, Tcheremissians and Votyaks. The Num of the Samoyedes, who are classed as North Turanians, is identical with the Thibetan Nam of the extreme south Turanian group.* The evidence here adduced on the strength of the science of philology leads us to classify the primitive Turanian religion with the primitive Aryan and Semitic as a nature-worship with the sun as chief divinity.

So far our inquiry has led us to the discovery that the root of all ancient polytheism was a conscious nature-worship. We also observe that the original meaning of the creed, as expressed in its conscious element, loses itself in later developments. In the process of time the primitive form degenerates into an unconscious nature-worship, and grows finally into a cumbersome mythology. The Greek Zeus was a mythical being, but the Aryan Dyaus was the actual sky or heaven. The Greeks retained the name but lost the signification. The old Aryan faith possessed a visible bond of unity in the conscious knowledge that it was a direct nature-worship, enjoying the order and unity to be found in nature itself. The derived systems lost the knowledge of this principle of unity. That natural relation between the dawn (Atena) and the sky

¹ M. Müller, Lectures on Science of Religion, Lecture III.

² Idem.

(Dyaus) grew into a myth. It became Athêne springing from the forehead of Zeus. In like manner the Egyptian system became mythical, and lost the original meaning. Horus vanquishing the Typhon takes the place of the sun dissipating the darkness of night, just as among the Greeks Apollo slays the Python.

The Chaldean system underwent the same changes. It was rooted in a solar worship overlaid by an accretion of myths to explain what had been lost in the lapsed form surviving. "Of the general character of the Assyrian religion," says Sir George W. Cox, "we have a terribly vivid picture in the Old Testament. It was a systematic sun-worship, which would assume the most lascivious and cruel aspects. The sun has been worshiped at first under a multitude of names; and as in the Aryan world, so here, each name in process of time became the title of a different god. Then Bel or Baal, and Moloch, the ancient Milcom, and the Sepharvaite Adrammelech and Anamelech, the Moabite Chemosh, and the kindred Shemesh and Shamas, all (like Nebo and Tammuz) titles of the sun, became separate deities by the same process which assigned Apollo and Helios, Perseus and Endymion, a distinct personality."

Amongst Turanian nations we discover the same process of growth or rather decay, from a primitive conscious nature-worship to a multitudinous pantheon, which loses its primary signification and visible bond of unity in the accumulated myths of ages.

In this process, universal to all polytheisms, we may observe a movement from simplicity to multiplicity, from unity to division. The development is both multiple and analytical. Gods are multiplied a hundredfold, and the same god is divided over and over again, until the many aspects and functions of the one in time become personified into as many distinct deities. Apollo, Heracles, Artemis are all sun-gods, Apollo, the bright, strong sun, striking from afar; Heracles the sun performing its various functions in the course of its diurnal journey; Artemis the milder, gentler aspect of the sun; Horus is the rising sun, vigorous and youthful; Ra the majestic midday sun, Osiris the setting sun going down into the realms of the dead. The Chaldean Anu is the sunken sun, Bil the midday sun, Hoa the sun's rays, and all the principle Canaatic gods are either the sun himself or his beams under their manifold different aspects.

Primarily then we have one object of worship which becomes in the course of time divided into many distinct deities. In this we perceive a loss of simplicity and a descent from unity. The multiplicity goes on in direct ratio to the increase of time. The older grow the polytheisms, the larger the number of their divinities and the wider the divisions. Accompanying these changes is

the loss of the consciousness of the real object of worship and the gradual transfer of the cult from it to a host of mythical beings. The parent creed has an objectively real worship; its derivatives substitute fabulous creatures in its place. These facts, drawn from the internal character of the ancient polytheisms themselves, clearly indicate a movement in man's religious history outwardly from the common centre of a conscious sun-worship, and therefore away from unity. This process is analytical, not synthetical. In the source we find simplicity and unity, in the derivatives multiplicity and division.

To reinforce this conclusion we have another factor in ancient polytheism, which has not yet been considered; we have seen that all the pantheons of ancient peoples are rooted in a primitive conscious sun-worship. In all these various systems the sun-god holds the foremost place. But back of the sun-god looms the presence of one greater still. This distant god has no symbol and no altar; his cult is vague and rare. He was a hidden god, and seems to have been beyond the capacity of the popular imagination. He was regarded as too remote from men to concern himself about them or their affairs, and dwelt in mystery inaccessible to the human mind. Yet he was always present; never too distant not to be at last recognized. In spite of the popularity of the sun-god's worship, its strong appeal to, and its tenacious hold upon the imagination, that presence beyond could not be shut out. It brooded over the world and made itself felt, although man's face was averted. As light through the closed lid it made its presence known, though not seen. By the Egyptians he was called Ammon, the concealed god, "a recondite, incomprehensible divinity, remote from man, hidden, mysterious, the proper object of profound reverence." 1 His name amongst all the Semitic peoples of Asia, Chaldean, Assyrian, Canaatic, and for the nomads of the desert was II or El. Hence comes Eloah, identical with the Arabic Ilah, God. With the article Al-Ilah, it becomes Allah, the God of Mahomet. Like the Egyptian Ammon, Il or El had no temple and no sacrifice. He was worthy of the profoundest reverence, but too remote to be accessible to human worship. Behind the Chinese gods "there looms a supreme power, Lord of the Sky, Ancestor of all things." To the older Aryans he was Dyaus, superseded in the popular worship by Indra, the sun-god. While Thor and Baldur, sun-gods, were the chief objects of worship to the ancient Norsemen, Zio, Tew or Tir stood in the place of that Supreme Being so distant yet ever present. Back of Zeus and Jupiter was a higher still. For It there was no outward expression, except in the vague appellation Fate. It represented an

¹ G. Rawlinson's Ancient Religions, chap. i.

implacable, immutable will before which even the gods themselves bowed irrevocably.

In all polytheisms we discover this seemingly contradictory element, a dim conception of a Supreme Being back of the gods of the pantheon, universally acknowledged in spite of his remoteness and in spite of the firm hold rival gods had upon the popular imagination. Another striking fact may be added to this. We know of one ancient people whose religion was never polytheistic. The entire history of the Jews shows that their national and political existence was one prolonged struggle to maintain their monotheism. When all other peoples of the earth were, and had been for centuries, polytheistic, the Jews preserved their monotheism intact. Politically they were an insignificant tribe in the midst of great empires. With Egyptians, Assyrians, Phænicians and other powerful peoples they came in constant contact and conflict, and yet, despite their adverse environment, this politically weak and despised people maintained the creed of Jehovah.

Thus the mythological polytheisms of the ancient world are seen to have taken their root in a system of conscious natureworship, which must have been a creed of simpler type enjoying a bond of unity lost to the creeds descended from it. Encircling these later developments, like the embrace of the outer firmament around the visible universe, and looming persistently back of them, was the awful presence of One Supreme and Incomprehensible Divinity. As the internal evidence of these polytheisms shows a process of religious decay from unity to multiplicity, from the one to the many, so as we go back along the lines of man's religious history, we converge nearer and nearer to monotheism. To heighten the force of this we have the testimony of all polytheisms to the recognition of One Supreme Being, whose memory lingered in man's minds and made itself felt in their hearts, even when the sway of polytheism was strongest and its corruptions rankest. Moreover the history of the Jews witnesses to the perpetual presence and survival of monotheism amongst an insignificant people, when it had been lost to all other nations of the earth.

Our investigation has now reached that point where we may push our inquiries still further back and ask ourselves what could have been the religious creed which preceded this conscious sunworship, which, as we have seen, is the root of all polytheisms? It would be in contradiction to the natural course of religious history to hold that man first paid religious veneration to lesser things and then arrived at higher by way of synthesis. He could never, as a recent theorist (Herbert Spencer) holds he did, have begun with the worship of ghosts and stocks and stones, and then risen to a conscious sun-worship. Such a supposition is entirely

gratuitous, and not only unsupported by data, but contrary to the constitution of the human mind. The most striking and conspicuous natural object would certainly be the first to claim man's religious admiration and veneration, provided no supernatural object had already engrossed his attention. That object which would seem to be most nearly related to man's life, its necessities and its happiness, that object which would be most potent for good or evil in his eyes would assuredly be the one to which he would naturally and indistinctively direct his worship. what object throughout all nature more brilliant, more beautiful, more majestic than the sun? What object more closely allied to man's life than the great luminary of the heavens, bringing light and heat, those vivifying principles which cause all nature to blossom and bloom, and draw forth from the bosom of the earth food for the sustenance of man and beast? What throughout all nature more beneficent and more welcome than its fructifying power? What more potent than its deadly rays in time of drought and pestilence? With the sun in the heavens in the full blaze of its glory is it possible that primitive man could have turned to the worship of lesser things, granted that he had once forgotten the One True and living God? The worship of ghosts and stocks and stones could only have developed after man had abandoned his conscious sun-worship, in later ages of religious degeneration and decay. Ghost-worship and fetichism could never have been the first but must have been the last form of man's religious veneration. So far from rendering a true account of man's primitive creed, the ghost theory describes the very reverse of the religious process as it has historically and naturally should develop. The conditions it postulates are the actual result of final decay. paints religion at its lowest ebb, in a state nearing dissolution, not in the vigor of its beginning. Conscious sun-worship, out of which we have seen that all subsequent polytheisms developed, could not have been polytheistic in the strict sense of the word. A direct and conscious worship of the sun as highest and first divinity must have enjoyed all that visible unity which is necessarily embodied in the conception of the primacy of the solar orb in nature, and the consequent subordination of all else to it. and darkness, dawn and evening, moon and star, cloud and rain, storm and wind, earth, fire and water must have all been recognized as subordinate elements dependent upon the sun for their well-being, and therefore subject to it. The prevalence of this notion we have traced through all mythologies which in time pushed the parent worship from its place. In the mind of primitive man there must then have been the conception of one presiding deity above all others, ruling and directing nature in its course. When we take in evidence the terms of address employed towards

the ancient Vedic gods we find a substantial witness to this fact. "The flexible and interchangeable character of the old Vedic gods," to quote Sir George W. Cox again, "Allows them to pass without an effort from one name or thought to another. There is no rivalry between them, and no antagonism; Agni, Maruna, Indra, each is greatest; and when each is so named the others are for the moment forgotten. Or else Indra is called Agni, and Agni Indra, each being Skhamba, the supporter of the universe."1 Speaking of the general character of Agni, the same writer adds: "He is pre-eminently the regulator of sacrifices, and as such, answers to the Greek Hestia and the Latin Vesta. Of every one of the worshippers he is called at once father, mother, brother and He is Vasu, the Lord of life. He shields men from harm during life, and after death is the psychopompos or guide of souls in the unseen world. In short Agni is but the name for the one God." And again: "They call him Indra, Mitra, Maruna, Agni, that which is one; the wise call it many ways; they call it Agni, Yama, Matarisvan. But there was at the same time in India as elsewhere, the tendency to discern in each name the mark of a distinct personality, and to invent for each a distinct mythical history. This tendency especially affected the popular belief and the popular practice, and the monotheistic convictions of the sacerdotal caste were not allowed to interfere with either. Thus, because two of the flickering tongues of the black-pathed Agni were called Kali, the black, and Karati, the terrific, these became names of Dargas, the wife of Siva; and a bloody sacrificial worship was the necessary consequence."3

Professor Max Müller tells us that "ancient language is a difficult instrument to handle, particularly for religious purposes. It is impossible in human language to express abstract ideas except by metaphor, and it is not too much to say that the whole dictionary of ancient religion is made up of metaphors." "Place yourself," he goes on to say, "in the position of those who first are said to have worshiped the sky. We say that they worshiped the sky or that the sky was their god; and in one sense that is true, but in a sense very different from that which is usually attached to such statements. If we use god in the sense which it has now, then to say that the sky was their god is to say what is simply impossible. We might as well say that with them spirit meant nothing but air.4

In other words, it was only by analogy that words signifying sky were used to express primitive man's conception of God. Looking out upon nature around him, he selected, by an almost

¹ Sir G. W. Cox's Mythology and Folk-Lore, chapter iii.

³ M. Müller's Science of Religion, Lecture IV.

² Idem.

⁴ Idem.

invincible choice, the name used for its most enduring, wideextending and majestic object wherewith to express in human speech his thought of the Eternal, Omnipresent and Omnipotent Being, who rules and governs the universe. Dyaus, the Bright-Shining-One-in-the-Heavens, or Maruna, the All-Surrounding, All-Enduring-One; or Agni, the Everywhere-Present-One, became the polynyms for God.

In the course of time, when the primitive force of this conception began to recede into the distance, that tendency, which we have seen afterwards develop into the world's polytheisms, commenced its work of splitting up the unity of its first idea of one God into many. The first step was to imagine a distinct god for every analogous expression which had been applied to the one God. The polynyms characteristic of the many attributes of the One thus became the fruitful source of subsequent polytheisms. Dyaus, Agni, Varuna ceased to be applied to One alone, and so grew into the appellations of many distinct deities, thus laying the foundations of all mythologies.

There is but one conclusion to which this evidence brings us. The creeds of the ancients clearly bear witness to a common element, which shows that all had taken root in the primal conception of the unity of their object of worship. Their very differences only serve to define this point as a shadow reveals more clearly the direction of the source of light which casts it. Despite, then, the differences we find in the bygone faiths of the ancient world. notwithstanding their debased and monstrous forms, we are forced to admit a common element which reposes solidly and firmly as a common foundation beneath all heterogeneous accretions. The creeds of men may have been as varied and as manifold as the shifting aspects of the clouds, errors of the grossest character may have sprung from them, they may have been the source of crimes innumerable, of sufferings untold and of the shedding of rivers of blood; yet, that unifying element, which was the only salt amidst so much corruption, endured firm and unshaken under the fiercest storms of human passion and perversion. Nations rose and fell. creeds began and decayed with them, but through all changes, all vicissitudes, this fundamental principle remained intact. Men might worship Indra and Vishnu, Jupiter and Athêne, Isis and Osiris, Ormuzd and Ahriman, Moloch and Astarte, Thor and Baldur; they might sacrifice to these false gods even to offering up human victims, yet back of all, hidden in the awful dawn of the ages, reposed the image of One Indivisible God, of whom these were but the distorted shadows projected over the world by the darkened imagination of a corrupt race. Men clung to their gods, who stood between them and the knowledge of the lost Supreme Being, at the cost of life itself, because they mistook the false for

the true. The unquenchable fire of worship in the human breast could not be extinguished, even though it burned at unhallowed altars. Man could never have come to the worship of false gods if he had not once known the true God. The esoteric meaning of Heathenism has but one lesson to teach: it was the human heart's prevailing sense of the existence of a Supreme Being imperfectly endeavoring to express its meaning through the multitudinous forms of error.

This is the clue to guide us safely through the snarl of man's religious history, and without which all is inextricable confusion. Amidst all the fluctuations of time there exists an enduring element unscathed. Decay and death might devour with capacious maw kingdoms and creeds, but the foundations upon which these latter rested remained unshaken; violence and wrath might overthrow their temples, and the fiery furnace of human passion consume their altars, but below these storms the hidden wells of truth lay in peace and quiet. Vain and fleeting as has been the life of man, putting forth its fruit to perish after a little time, beneath the swiftness of change can be seen the deep and silent ocean of his primal years resting in strength and calm. Although discord and strife seem at times to have gained the mastery over peace and love, yet even amidst the horrid clamor of contention is discernible the low, deep undertone of a divine harmony. The struggles and groans of toiling humanity, its hopes, its desperation and its degradation only bring out in stronger relief the divine tragedy of its living. The inestimable value man has placed on his ideals, the awful sense of an incalculable loss in his heart are manifest in the tireless efforts he has ever made to hold to the broken fragments of the truth he still retained, putting a price above life itself upon the fleeting images which shadowed and obscured the primal light. Not altogether vain, not wholly meaningless, have been his halfarticulate clamors after truth; not wholly profitless the altars of his false gods, not absolutely evil the grossest idolatry his blinded intellect has paid to stocks and stones, for all this was but the perverted and defiled expression of his heart's aspiration towards the blurred image of Divine Beauty, which still dwelt in his soul as the ineffaceable memory of the lost Truth. Beneath the evershifting surface endured this immutable memory and this unconquerable aspiration, clouded and feeble, it is true; but for all that the central point of all heathen systems, around which they gravitated, and from which came all the dim light they retained to imperfectly illume the else utter darkness-

> On the glimmering limit far withdrawn God made himself an awful rose of dawn.

> > CONDÉ B. PALLEN.

ANTHROPOLOGY: AN HISTORICAL SKETCH.

IN proposing to give an historical sketch of anthropology, we might almost venture to call it a biographical notice. So dear might almost venture to call it a biographical notice. So dear and charming is this science of theirs in the eyes of anthropologists that their rhetoric indulges in amplification and their fancy It would appear that anthropology first in fervid exaltation. broke upon their vision, clothed in its present bewitching guise, when Charles Darwin dressed the new creature in the literary garb of his book called "The Origin of Species." In its popular, fashionable attire this science is nothing else than the evolution of man as ushered into the world through Darwin's famous book. And, considering the strict kinship which Professor Huxley owns with all the ancestry, relatives and prospective posterity of evolution, our readers will not be unduly surprised at his festive vein of congratulation, in an address which he delivered on celebrating the twenty-first birthday of Darwinism. Thus he delivered himself in 1880, when speaking of Darwin's book, "The Origin of Species:"

"Only a few months," he said, "are needed to complete the full tale of twenty-one years since its birthday. Those whose memories carry them back to this time will remember that the infant was remarkably lively, and that a great number of excellent persons mistook its manifestations of a vigorous individuality for mere naughtiness; in fact, there was a pretty turmoil about its cradle. My recollections of the period are particularly vivid; for, having conceived a tender affection for a child of what appeared to me such remarkable promise, I acted for some time in the capacity of a sort of under-nurse, and thus came in for my share of the storms which threatened the very life of the young creature."

Somewhat less metaphorical is M. Adrien Arcelin, a distinguished Catholic scientist of the continent, while the character which he gives to the science throws into relief some traits which the other gentleman suppressed. "Anthropology," he says, "is definitely a science altogether new. Hardly in existence, its lot was cast in turmoil and notoriety. Unlike virtuous maidens, she has made people talk about her very much from her tender years. This is not surprising. More than any other, this science has boldly taken a hand in the fight which, under the impulse of conflicting philosophical notions, divides the naturalists of our day into two schools;

¹⁴ The Coming of Age of the Origin of Species." Address, 1880,

one of which is positive, prudent, advancing by deductions, closely adhering to facts, making progress slowly but surely; while the other is enterprising, audacious, transgressing the limits of observation by ingenious inductions, and scrutinizing nature for the purpose of making a case of its own." 1

Our purpose is to give a notice of this intrusive creature called Anthropology—not the prudent, cautious science which may claim descent from Linnæus, Buffon, Cuvier, but the present claimant for notoriety which is descended from Lamarck and Darwin, and has won the place it bid for by making all of us descend from the brutes.

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And, first, as to the name. The Greek word anthropos means "man." Anthropology then is the science which has man for its subject, or, at least, undertakes to treat of man. The undertaking has been enough to confer on the Darwinian theory the dignity of being considered anthropological, though we shall have more than reason enough to see that Darwinistic science is indeed about man, but with the man left out.

Taken in its broad and proper sense, anthropology is a branch of philosophy, older than Aristotle. The study of man's living self, always the most interesting of investigations for the human mind, was located by the Greek philosopher in his Physics. It was the substantial being, as visible, tangible and conscious, that was taken by him as his subject, and in this substantial being a substantial form, or soul, or psyche was included. Such soul was no abstraction, nor was it any unknown force; still less was it any portion, or atoms, or molecules of that body, which it was primarily required to constitute as a body in the first instance. It was the immediate and adequate principle of all the visible and intelligible effects in that human compound, physically present to him.

The scholastic philosophers of the Catholic Church, when treating the same subject, expounded their doctrine about it under the title "De Anima, or the Treatise on the Soul"; and this treatise, because it explained an ultimate constituent of a primary substance, was ranged under the dignified head of Metaphysics. Exchanging the Latin term, De Anima, for a Greek name, Psychology, which means the same thing, modern philosophers have treated the science of the soul in precisely the same way as the older Scholastics. Psychology is the science of Man, because the soul, if understood, explains all else that is in the human compound. It explains man as a vegetative or growing organism; it

¹ Revue des Questions Scientifiques, 1879, tome vi., p. 413.

explains him as endowed with animal sensibilities; it explains him as an intellectual being capable of thought.

In recent years, one or other Scholastic philosopher, like Sanseverino and Palmieri, has employed another term, Anthropology, or "science of man," to denote the same department of Metaphysics; nor would the designation be incorrect if only it had prevailed. But, seeing that a singular, restricted and mutilated use of the term has now foreclosed any other employment of it, and has applied it thus narrowed down to courses of study, to books, associations and the like, it would appear as if henceforth philosophers were debarred from designating Psychology as Anthropology; or, at least, if they did so, it should be with such an extension of their subject as would cover the main part of the now prevalent signification.

What, then, is the prevalent meaning of the term? It is "the study of man, as a genus and species of the animal world, conducted with reference to no other considerations than those which would be admitted by the investigator of any other form of animal life." Here it is evident that, as no "other form of animal life" has a spiritual or immortal soul, or is considered to lay claim to it, no human soul need be looked for in a field of this kind,—forsooth, "among considerations that would be admitted by the investigator of any other form of animal life."

In fact, to pick up at random some illustrations of the scientific fashion in vogue, one gentleman, an anatomist of Lyons, in France, poses the very ample philosophical questions. What are we? Whence? Whither? And, then, replying to them, invites his auditory to retire with him into the sacred retreat of a laboratory in the planet Saturn. There, apart from the biassing influences of passion and predilection, far removed above the clouds of such things as religion and revelation, he dissects human bodies, which, "in the name of modern anatomy," he desires to locate with scientific precision in the universe of things. And, as the final conclusion, this genuine disciple of the German, Haeckel, enunciates that "man is a vertebrate animal, of the order of primates, of the family of hominiens, the last product of evolution, latest link in the long genealogical chain, which extends backward even to those protoplasmic masses, whereof the Bathybius, so minutely described by Huxley, offers us one of the best specimens." It seems to make very little difference to originality and logic of this type, that the "Bathybius," thus posited as representative of the original and essential link in the whole biological chain, should have been repudiated ten years earlier by its own progenitor, Huxley, as an unfortunate figment, which failed to make good the

¹ Prof. Huxley, "The Advance of Science in the Last Half-Century," 1887.

promises of its youth. But motes of that kind do not obscure the glorious vision of science down the unknown vista of unverified time. Again, a physiologist at Nancy opens his course with an erudite exposition of "nervous evolution," and succeeds in explaining thereby "the transition of the microscopic drop of protoplasm to the human brain and to—thought." All this, and a thousand other such doctrinal statements in every line of science and study, indicate with sufficient clearness what is taken to be the scope of Anthropology, and how many other sciences may be impressed into its service. It is the great "Philosophy" of the latter half of the nineteenth century.

To make the matter clearer still and put it in a categorical shape, we shall give here the very satisfactory account of Professor Otis T. Mason, incorporated in the Smithsonian Report on the Progress of Anthropology, 1890. He says: "A complete syllabus of anthropology would include—first, what man is, and second, what man does." This division of the science about man is complete, supposing that the first member, "What man is," includes the question, whence he comes, and that the other member, "What he does," includes whither he goes. Thus taken, and it is the sense of the syllabus which follows, anthropology is seen to be adequately commensurate with all philosophy, and more. The form of the division is quite scholastic in its neatness; a philosopher might have used the words, esse et operari; esse et agere; quatenus homo est, et quatenus causa est.

Now these two members of the division the writer denotes by suitable appellations: "What man is, may be denominated structural anthropology; what man does, functional anthropology." This nomenclature is unfortunate from a logical point of view; for the terms, as derived from common usage, are altogether inadequate to cover the range of ideas conveyed. Structure is an attribute of the organized body only; function, an exercise of merely organic activity; one anatomical, the other, physiological. This is all that the terms denote; and it is all the writer means in fact.

However, if the meaning and terms alike are inadequate to express the range of the science,—"What man is and does,"—they are perfectly adapted to determine the range of vision within which scientists confine themselves and limit their view of anthropology. The syllabus that follows gives absolutely no place to the essence of man; and it omits accordingly the highest faculties of man, intellect and will. Nor does it omit them merely; it conveys a denial of them; since the names of the sciences which should denote them are studiously diverted to senses that com-

¹ Cf. Revue des Questions Scientifiques, tome xxv., 1889, p. 358.

pletely ignore them. The names of Religion, Philosophy, Sociology, Æsthetics, are dragged down to express phenomena of matter and force. Thus the report reads:

Phenomena.	Science.
All mankind as natural objects,	Anthropology,
What Man Is—Structural Anthropology.	
2 3	
The embryo of mankind and life of the	
individual, The body of man (specific and compara-	Ontogeny.
The body of man (specific and compara-	
tive),	Anatomy.
The functions of the body,	Physiology,
Form and color, weight and number, .	Anthropometry,
The nervous system in relation to thought,	Psycho-physics.
Natural divisions of mankind,	Ethnology.
What Man Does-Functional Anthropology.	
	• ••
To express his thoughts,	Glossology.
To supply his wants,	Technology.
To gratify his desires,	Æsthetics.
To account for phenomena,	Science and philosophy,
To co-operate in the activities and ends of	
life,	Sociology.
In presence of a spirit world,	The science of religion.
The Past of Human Life and Actions is Studied-	
(1) In things decayed or dug from the	
	Archæology.
earth,	•
(2) In the decipherment of inscriptions, . Palæography.	
(3) In the acts and sayings of the unlet-	Folk-Lore.
tered,	
(4) In written records,	History.
Sciences Helpful to Anthropology.	
To determine the material of art-products,	Mineralogy.
To fix the age of relics,	Geology.
In studying the mutual effects of man and	- 67 -
the earth on each other,	Geography.
To determine man's place in nature and	
his acquaintance therewith,	Botany and zoology.
	,

Such then is the new science of anthropology; such the meaning made perforce to underlie the name. It includes philosophy, ethics and religion, without giving us a fragment of any. On the lines thus marked out, we may count in any current year at present as many as 1300 works published, of all sizes and in all languages.

¹ Smithsonian Report, 1890; "Progress of Anthropology in 1890," p. 528.

II.

The gross results of the pursuit, as thus conducted, are precisely those, which, looked at prospectively by Charles Darwin and his supporters, moved him to originate it, and impelled them to forward it. Darwin's school have attained by means of this scientific fashion the end to which they aspired; and he himself lived to see the purpose of their existence fulfilled. That is summed up in the word, Evolution, or the development of all living things from matter. Everywhere in the phenomena of nature, man included, this science finds matter. Matter makes up man, it makes up the lowest rudimentary life, it constitutes the inorganic world which has no life, away to the stars and beyond; and it was before the stars were. It is all matter, arranged diversely everywhere. Regarding man in particular, as compared with the animal life beneath him, the statement is peremptorily made: "The ingredients being the same, the difference must lie in the mixing." 1 Man is mixed just a little differently from the primeval living "moneron," and, in turn, that protoplasmic speck is mixed a little differently from the gas in the sun and stars.

The line of development from one extreme to the other is traced with all that devotional fervor, which throws a glow about the shrine and the ceremonies of a new cult. We are served with categories of cosmic evolution, covering inanimate nature, and of biological evolution, comprising all life, vegetative and animal. There, where the lower animal is seen to approach man, we are addressed by the eloquent menagerie of the monkeys. Monkey to monkey is seen passing on the spark of life, till man gets it, and he is. In him, no exhibition of vitality is exempt from the filiation, no function, however noble, no faculties however delicate. His most refined emotions are surely analyzed with the most delicate consideration, when a lady takes the scalpel; and thus Madame Royer delivers the judgment: "L'anesse doit certainement trouver du charme au braiement de l'âne." The make-up of the protoplasm in the ass is a mill that turns out one sort of grain; that in a man turns out another; we call the product differently, a donkey's emotional bray or a man's sentimental compliment; but the mill is the same.3

There were evolutionists before Darwin, even in the sphere of biology, where his lucubrations and conclusions came to rule su-

¹ Edward Clodd, The Story of Creation; a Plain Account of Evolution, ch. 7, The Origin of Life.

² Revue des Questions Scientifiques, xxv., p. 364.

² We have given illustrations of this side of the subject in an article on "A Baby's Footprint and Other Vestiges"; AMERICAN CATHOLIC QUARTERLY REVIEW, January, 1893, pp. 19-41. Hence we need not pause to give further illustrations here.

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preme. But his precursors, Erasmus Darwin, Lamarck, Robert Chambers, while exciting much comment, and arresting even scientific attention, struck no deep root in the scientific mind; although, as is usual in all revolutionary movements and agitations, progress was steadily made. There have never been wanting men who wanted no God; men with whom theology denotes merely, as Edward Clodd seriously puts it, "Man's relations to the god or gods in whom he believes." And it does not require much anatomical dissection of a godless subject to find out, that a godlike thought wandering over its features is a false light for seeing it to advantage. The scientific mind, in fact, seems to resent the light and thought of God as an intrusion on its individuality, and an interference with its well-being. Either ignorantly, or maliciously, it travesties the idea of a Creator, as that of an agency applying every creature to its work, and leaving it nothing to do of itself. This supposition is a gross one; yet it is universal in all the presentations of science. It is gross, for the most elementary idea of God, as Creator and Provident Governor of the universe, conceives of Him, as making things to be, and making them causes likewise, competent to act in their own sphere. It is only where they are incompetent to act, that He acts directly, as in the creation of a spiritual soul. It is only for special and exceptional purposes that He ever chooses to override them, as in the operation of a miracle.

To the liberal demands of science in behalf of atheism; correspond its intolerant requisitions made of "the orthodox." If we, "the orthodox," will not give up Genesis, it requires of us that we "understand" Genesis; and we are sure to find that, "understanding" Genesis, we shall be at liberty to grant any "conclusion," which "a just study" of science requires. Wherein the audacity of this intellectual revolution tallies perfectly with the device, De L' audace! et encore de l' audace! of the great social revolution, which since the end of last century has set everything adrift. Then good people said: Give in a little for the sake of peace! And good people now say: Pare down a little; peace for Genesis at any price! "Understand" it; you'll find it agrees.

But, first, let us understand what the just study of Darwin led him to. He observed with great minuteness, what every one knows in general, that there is a tendency in plants and animals to change, to modify their structures, functions and form, according as change of environment, or other cause, operates upon them. Hence come the variaties and races, in vegetable and animal life. Again, in reproducing their kind, they tend to multiply their stock

¹ Story of Creation, ch. xi., \$5, Evolution of Theology.

in what is called a geometrical ratio of increase; so that any species of the lower organic world, if left to itself, would seem to be capable of rapidly occupying the ground, the air or the waters, and eating up all the sustenance, which is provided for many kinds. view of the geometrical ratio of increase, as affecting the propagation of the human race, had already suggested a false theory to Malthus, in the question of population and political economy. Since, in the ordinary course of nature, only a due proportion of each kind survives, Darwin considered that some discrimination He took it, that the best survive, was practised by nature... and that nature selects the best. Hence this discrimination he spoke of as "natural selection"—a word, which has caused his school infinite trouble; for neither does his theory of fortuitous adaptation to environment allow of any provident "selective" principle, nor do the facts warrant any such element as a positive selection in nature. There is in general but a residue left by mutually counteracting and compensating agencies; there is a resultant remnant only. However that be, Darwin inferred that the best, for the time being, survive; they become ever better and better, by some fortuitous process; until they may at last become the best absolutely. Now, besides all this, it is certain that great geological changes have taken place in the conditions of this earth; and these changes he could pleasantly invoke to account for any other unknown alterations in organic life; he could charge geology with having effaced the records of what, according to him, ought to have been. Hence, by a genuine Darwinian process of logic, his "conclusion" stood forth, that species, as we see them, originated in lower species. This is the whole argument of the famous book, "The Origin of Species."

Darwin did not argue much. He was not capable of it. He clubbed facts together, as the Hebrews clubbed words, and left you to understand that one is a nominative and the other a genitive; or as men in the ordinary affairs of life associate notions together, without committing themselves to affirming what they mean; and what they mean is clear, yet they are not indictable for libel.

Men were just prepared for such a thesis, if presented cleverly. They should have preferred it to be clearer; but, what he left unsaid at first, they said clearly enough for him, and with audacity. War was declared, in the name of accurate science, against all Scripture, theology, and every sound science that was. He and they became famous, and the vast, all-reaching science of Anthropology, like the goddess of reason half a century before, was seated on the altar; while the proletariate that hangs on to it looks round to examine the foundations of the throne, and sap the substructure of society.

As to the scientific merits of Darwin's thesis, we may remark that not a single one of the ideas put forward by him remains today as he put it forward. All subscribe to the substantial fallacy of the system, that of ignoring specific distinctions, or impassable barriers between true species; they fly for refuge to the "unknown," to what "may have taken place," though to do so they have to fly in the face of their own pet principle of uniformity in nature's laws, of a continuity, a permanence of the same laws and the same course of nature, which we witness about us, and which affirm impassable barriers, dividing one species from another. But beyond this fundamental article of agreement, in ignoring specific distinctions and affirming the possible transmutation of species, a tenet on which every evolutionary theory must stand, if it is to stand at all—the Darwinian theory that was coincides exactly with no evolutionary theory that now is. Selection, survival, heredity. the effects of use and non-use—all the Darwinian landmarks have shifted; and there is a process of disintegration going on, which gives infinite occupation to his followers; and this is the occupation which makes firm the reign of evolution on the scientific mind. It is like the reign of Protestantism, which during four centuries, has maintained itself by breaking up, and now reaches its term, when the gaseous elements are already evolved into the thinner air, and the impalpable residue furnishes nothing more to break up.

In a word then, the momentous epoch of Darwinian illumination was very much like other momentous epochs; things came about so, because they were wanted. A due "period of incubation," if we may borrow a phrase of Mr. Grant Allen's, had gone before, and Darwinism was the product. If one man had not signalized that date with such a deed, some one else would have done it, and only the name of the thing would have been different. It is the one who is bold to do the deed, or to suffer the illusion in a striking way-agere et pati fortia-that centres universal attention on himself. He fixes the rallying point, establishes the base of operations, and gains the immortal glory which we find attaching to some names in old almanacs, or to some skulls in a military museum: "N. N., 1859, the first person seized with the epidemic visitation of this year, from whom it spread with marvellous rapidity through the whole population"; or, "The perforated skull of N. N., who was the first person shot in the great battle of Y-, wherein 10,500 bit the dust."

III.

Geology, moving on parallel lines with Darwin's biological investigations, deserves a very special notice. The hero of "The Antiquity of Man," Sir Charles Lyell, serves as a pathetic instance of

how the new creed broke down the barriers of religious sentiment and belief, even while he himself regretted the subjective change of which he was conscious. By his thesis of a very remote geological antiquity, as regards both world and man, he contributed the most material reinforcement to Darwin's conception of the slow and fortuitous transformation of species from one brute form to another. Yet he fought against this doctrine when applied to the brute as evolving into man. At length, with reluctance, he gave in, and, writing to Sir Joseph Hooker, referred to his subjective difficulties in these terms: "I plead guilty to going farther in my reasoning towards transformation than in my sentiments and imagination, and perhaps for that very reason I shall lead more people on to Darwin and you than one who, being born later like Lubbock, has comparatively little to abandon of old and long-cherished ideas, which constituted the charm to me of the theoretical part of the science in my earlier days." And to Darwin himself he writes regretfully: "The descent of man from the brutes takes away much of the charm from my speculations on the past relating to such matters."

That allusion to the young is significant. Never was it more true that "the world was to the young." For just then, in England, the young generation of scientific men, unlike the age of Newton and others later still, was remarkably free from the notion of God and disembarrassed of all reverence for Him; and an evolutionary theory was felt to be ethically convenient, as it always is to be "without God in the world," sine Deo in hoc mundo.

But, however a "conclusion" might grate on Lyell's religious sentiment, his contribution towards the structure of an argument was noteworthy. His was the theory of uniformitarianism. It may be spoken of as belonging to a date gone by, for science has been rude in the handling of it.

In its broadest field, wider than Lyell's special study of geology, the theory posits the maxim that there has never been any change whatever in the action of causes that operate in the universe; that what is going on now has always been going on by the same causes and in the same manner as now. So much is the present the result of the past, that in the present course of nature you see the entire series of processes in the past; and without a break in the continuity or uniformity you may go back and reach the beginning of things, and explain the very genesis of the universe. In this widest, crudest form it disposes of the first beginning of nature by supposing that things began in the same way as we see them continue. Matter and force, somehow disposed the right way, grow up to be a pony, and a pony grows up to be a horse. Well, but how did the matter and force come to be? Why, they—grew!

¹ Grant Allen, Charles Darwin, etc., No. 128.

Uniformitarianism in geology was the special thesis of Sir Charles He published his "Principles of Geology" in 1830, and he laid emphasis upon the fact that natural causes, now at work and at the same rate at which they now work, are competent to account for the phenomena which have occurred in the gradual deposition of the stratified rocks. But his love of uniformity led him into computations of years and periods, which, as bearing on the age of the human race, have been subjected to rectifications on all sides; and school-boys now can cite facts from their books, and refer to phenomena in the rivers, lakes, and mountains, which assail the principle of uniformity and dismantle Lyell's conclusions. manner in which he served the interests of the evolution of species, yet to be propounded by Darwin, is thus explained by Professor Huxley: "The publication of 'The Principles of Geology,' in 1830, constituted an epoch in geological science. But it also constituted an epoch in the modern history of the doctrines of evolution by raising in the mind of every intelligent reader this question: If natural causation is competent to account for the not-living part of our globe, why should it not account for the living part?"1 is excellently stated, to the credit of both the professor and the "intelligent readers" he speaks of. For it means: If the natural causation of brute forces is competent to account for the deposition of brute, inanimate matter in the form of sedimentary rocks, why should not the same causation of brute forces account for the organization of living matter which is not brute, inanimate rock? To which the evident answer is: Why should it?

This was beside the geological question, which concerns only the antiquity of the earth, but which moved on, with the help of archæology, to the antiquity of man. Bone-caves and the industrial remains of ancient races were found by antiquaries, and these, with the relics of extinct animals, like the mammoth and the cave-bear, were referred to the date of certain geological deposits, which, on the theory of uniformity, must be very old indeed. Hence, instead of dating man's origin back a mere trifle of six thousand years or so, it was necessary to rectify the tables, and so his origin was relegated to the trifling distance beyond of one or two hundreds of thousands of years. And thus, three years after Darwin's "Origin of Species," Lyell's new book, "The Antiquity of Man," came to supply a kind of historical background to the eternally slow, infinitesimal changes, which the evolution of animal life required, on the basis of natural selection.

Now, geology is very like Assyriology, Egyptology, and other advancing sciences, which deal largely with the mythical. Thus

¹ The Advance of Science in the Last Half-Century,

far, the interpretation depends very much on the bent of the interpreter's mind. And there is a fair field for genius. Again, they resemble one another in the family trait of uniformitarianism, which means that there has been the strictest consistency up to this in saying and unsaying the same thing, in positing "conclusions" and then gainsaying them, and on the wreck of their former selves mounting up to higher things. But, till they are fairly mounted, any one who desires to establish a thesis of his own has only to make a selection of those authorities that make for him, and to omit the rest. The authority of what so-and-so says, or what so and-so thinks, is the stock in trade of the whole logical process. One most eminent orientalist has "inferred," another profound Egyptologist has "concluded," the first of geologists has even "suggested"; and lo! scientific logic has clinched the argument.

Geology, in relation to history, knows only one thing; and that is the relative age of one deposit compared with another; from which anthropologically there issues one scientific conclusion, and no more than one. It is that, if man lived contemporaneously with the deposition of a given stratum, he was as old as that deposit, neither older nor younger according to the testimony of that layer; he was younger than an older one, older than a younger one. To this degree of profundity can the geological argument reach. Beyond that, geology has not reached; it does not perforate the thinnest crust of the question.

Is there no determining the absolute historic date, at which that deposit was laid? Uniformity in the rate of deposition will not do it; that assumption taken baldly would be a gratuitous postulate. Perhaps with the help of other sciences a date may be extracted? So it may. What are those helpful handmaids to this noble chronicler of "secular changes?" They are only the following, and all of them must work together: astronomy, meteorology, geography, natural physics, terrestrial physics, chemistry, botany, zoology, physiology, comparative anatomy, mineralogy, and perhaps one or two more, such as documentary history. When all these work together, it is not geology that is operating in its own field, but it is a general co-operative agency that is pulling at the quasi-philosophical tenet of evolution. The one special good turn they do to the geological stratum, is that they may enable the relative date of a certain deposit to be transmuted into an historic date-so many thousands of years ago. This cooperative agency of all sciences, required for the thesis of evolution, makes of Darwinism a universal science of induction, which, to establish anything, must base itself on all orders of facts, and on all the laws which reveal themselves in the boundless field of nature. When it shall have accomplished this gigantic feat, we are credibly informed that the result will be found to accord with Genesis, the one reliable historic monument in the world. If so, we are content in the meantime to keep the sacred record entire and intact; and we are thankful to science for its ultimate intentions, in the secular changes of its transmutations.

And we say besides: Give us premises, not "conclusions." Any child or dolt can draw conclusions when the premises are clear. But the fashion is to begin at the wrong end, and flourish the conclusions without scientific premises. Again, we say, present a scientific set of premises which show that the record of our race, as presented in Genesis, should be extended backwards, say only 2000 years. We affirm that the same premises, with a slight modification, will prove the record deficient by 10,000 years. You demur to this and repudiate and refute it—to save Genesis from an error of 10,000. We will take your identical refutation, and rescue the sacred record from your error of 2000 years.

IV.

The elder Agassiz would never admit the evolutionary theory: yet he rendered the new doctrine a service, which has enabled the fertile imaginings of Ernst Haeckel to build up almost a new science. He noted with accuracy the progressive advance in organization, which characterizes the various species occupying the earth at successive geological epochs; and, in this organic improvement, he discerned an analogy between the different steps of the progression and the different stages, by which an embryo develops to the adult condition in the higher specific organized forms. "In fact," observes Professor Huxley, "in endeavoring to support these views he went a good way beyond the limits of any cautious interpretation of the facts then known." As to the theory of Haeckel, founded on this, we gave a specimen from the pages of G. Romanes's "Mental Evolution in Man." AMERICAN CATHOLIC QUARTERLY, January, 1893, p. 23-24. On this basis of mere analogy, a subject worthy of a poet's pen, Haeckel has constructed a stupendous theory called "Ontogeny and Phylogeny"; as it every embryo were a kind of secret cipher, revealing to those who know how to read, the past history of all the ancestral races, which were the grandfathers and great-great-grandfathers of the race to which it belonged, back to primeval protoplasm. A fair example this, of how men jump at "conclusions" first, and build sciences out of them, before the premises have been proved!

Zoology and botany, or the sciences which deal with the laws

¹ The Advance of Science,

of living beings in the animal and vegetable kingdoms, though not brought into line with Lamarck's materialistic conception of the development of species, were being highly elaborated. And this was the field, as on his own proper ground, where Darwin broached the great theory of man's evolution from the brute. It was the field of biology; and here, we say, he was on a vantage-ground.

Biology, or the general science of life, led of its own nature to human life. It was made to include human life; so that biology should include psychology. And anthropology, which, as we noted before, might with propriety be taken as another word for psychology properly understood, is now taken to signify psychology as swamped in materialistic biology. Man, however degraded in conception, is still the centre of the visible universe. And so anthropology is the centre towards which every science converges; it is the term of every evolutionary theory; it leaves nothing beyond itself to desire; if even a deity is wanted by any one, man evolved can evolve his own deity. Thus the "evolution of theology" figures in an obscure part of the theory, and seems to be thrown in just for the sake of erudition. Theology signifies, as we heard Prof. Otis Mason tell us, the mental attitude that man chooses to assume "in presence of a spirit world," in which he chooses to believe.

This little theological by-play was the cause of all the sensation that made Charles Darwin famous. He touched a chord in the Christian sentiment of the multitude. Even if ecclesiastical forces had not come out in array against him, the sentiment of the multitude would have vibrated all the same. This was the secret of his notoriety, and, owing in part to his notoriety, of his success. And, to bring out this bearing of his theory, we cannot do better than quote verbatim the words of an excessively enthusiastic admirer of the founder of modern materialism. Mr. Grant Allen, in his work, "Charles Darwin; His Life and Work," expresses himself thus: 1

"It was possible to accept cosmical evolution and solar evolution and planetary evolution without at the same time accepting evolution in the restricted sphere of life and mind. But it was impossible to accept evolution in biology without at the same time extending its application to psychology, to the social organism, to language, to ethics, to all the thousand and one varied interests of human life and development. Now most people are little interested by speculations and hypotheses as to the origin of the milky way or the belt of Orion, but they understand and begin to be touched, the moment you come to the practical questions of man's origin,

¹ Chap. xi., p. 191.

nature and destiny. Darwinism compelled their attention by its immediate connection with their own race; and the proof of this truth is amply shown by the mere fact, that out of all the immense variety of Charles Darwin's theories and ideas, the solitary one which alone has succeeded in attaching to itself the public interest and public ridicule is the theory of man's ultimate descent from a monkey-like ancestor. Popular instinct, here as elsewhere profoundly true at core in the midst of all its superficial foolishness, has rightly hit upon the central element in the Darwinian conception, which more than any other has caused its fruitful and wonderful expansion through every fertile field of human inquiry."

Profoundly true was the popular Christian instinct; and true the anti-Christian instinct. All the lame theorizers of half a century had been moving on with a halt in their gait, from whatever starting point they came; and, when Darwin came walking straight to the land of promise, the sensation was superlative and the glory immense. Personally, he held back at first from stating quite clearly what he meant, because of his wonderful gentleness, his meekness, his respect for established beliefs, and we know not what other saintly and divine attributes, which made him the adorable creature he was. But others who took up the word, men like Vogt and Huxley, rang it forth with an arrogance and impudence not to be mistaken. Three years after the publication of "The Origin of Species," appeared Professor Huxley's "Man's Place in Nature." In this work the professor, not pretending to prove his point that man has come from the monkey, indicated the "evidence" that bore upon it. His frontispiece exhibited the famous series of apes, all in a row—the gibbon, orang, chimpanzee, gorilla, man. In the book he made the proper reservations, as became a rigidly scientific man; but the picture contains no reservations; and it is now part of the stock in trade of every scientific work and review, of every large dictionary and even of text-books in the public schools. It cannot complain of not being seen to advantage; for it requires only the "wet light" of passion and sensuality, which is sufficiently diffused among mankind, to throw about the picture a proper atmosphere as of an evening mist; the "dry light" of calm reason is reserved for the reservations. And after this, when Mr. Darwin so far overcame his superhuman gentleness as to publish his " Descent of Man," he said nothing which had not already become familiar to the world, through the energetic propagandism of his lieutenants.

As to his own deeper sentiments in this line, we are not left in doubt; and this leads us to the philosophy, metaphysical and religious, which underlies the whole revolution. It is always the action of philosophy, or the reign of ultimate ideas in men's

minds, that controls the course of events with far more power than the agitation of politics or the marching of armies; for armies and politics are themselves moved by the motives of final causes and the conception of first principles.

Darwin tells us that "man may be excused for feeling some pride at having risen, though not through his own exertions, to the very summit of the organic scale; and the fact of his having thus risen, instead of being aboriginally placed there, may give him hope for a still higher destiny in the distant future." This is nobly said; and let no obscurantist profane the dignity of such a sentiment with a vulgar thought—like that intolerable Dean Swift, who said with his usual bad taste that "the top felicity of mankind is to imitate monkeys and birds; witness harlequins, scaramouches and masqueraders; on the other hand, monkeys, when they would look extremely silly, endeavor to bring themselves down to mankind."

Profane! Let us return to Darwin and his contemplations of destiny and creation, of a first beginning and a last end. He uses the word "Creator." Thus, in the last sentence of his "Origin of Species," written at a time when his respect for established beliefs did not allow him as yet to say anything offensive, he delivers himself of this thought: "There is grandeur in this view of life, with its several powers having been originally breathed by the Creator into a few forms or into one." The simple Christian reader might incautiously infer from these words, that biological evolution in the mind of its evangelist was compatible with the truth of creation. No such thing! Writing to his friend, Sir Joseph Hooker, in 1863, the gentle critic says: "I have long regretted that I truckled to public opinion, and used the Pentateuchal term of creation, by which I really meant 'appeared' by some wholly unknown process." And, in 1879, he writes to a German student that "the theory of evolution is quite compatible with a belief in God"; but you must remember that different persons have different definitions of what they mean by God.1

So the popular instinct had not been mistaken. Catholics, in particular, need not be mistaken as to their own home interests in the question of evolution and in the minds of evolutionists. Thus in an article, "Mr. Darwin's Critics," Mr. Huxley writes: "In addition to the truth of evolution—indeed, one of its greatest merits in my eyes—is the fact that it occupies a position of complete and irreconcilable antagonism to that vigorous and consistent enemy of the highest intellectual, moral, and scientific life of mankind—the Catholic Church." Well said, indeed, by a man who, when

¹ Edwin Walmesley in the Month, vol. lxii, 1888, p. 386,

² Walmesley, ibid.

occupying a place in the municipal government of London, was a vigorous and consistent enemy of the poor Irish Catholic children in the English metropolis—an admirable specimen of the liberal mind, nicely compounded of arrogant bigotry, tyrannical infidelity and, meanwhile, all honey, and sugar, and compliments for the members of the coterie!

Thus then, by a new route, we arrive at another definition of anthropology, and, besides, a personal analysis of anthropologists. We define it thus: "The science about man's place in nature." This definition we take to be perfect in its generic note and specific difference. But every word needs an explanation.

We call it a science by courtesy, for it is no science at all. It leaves out all ultimate causes and refers to no higher science for what itself leaves out. It merely posits the "unknown" all round about; and the unknown is the light in which everything is to be clearly seen. It is, therefore, properly a craft for managing something.

That something is "man's place in nature." The craft has nothing to do with man, for it leaves out his essence, his soul, intellect, will; it busies itself only with the place that man shall occupy.

The place is that which he shall occupy in nature. But it is not universal nature that is in question, for God is left out. Nor is it universal created nature, for, like man's spiritual essence, so all angelic essence is lest out. Nor is it universal material nature, for the essences of all things are left out; they are bundled up in the "unknowable," or, which comes to the very same thing, they are called "atoms," "molecules," The nature that is in question is the visible order of things tangible, measurable, ponderable, subject to chemical analysis or nervous impulses; it is nature geographical, geological, technical. And, lest the reader, having too sound a mind to take easily any man's on-dit, should suspect us of maligning the advanced mind and its lofty aspirations, we challenge him to visit one of the "advanced" institutions of the day, and ask to see the "psychometric" and other such devices for measuring thought and soul, and, when he has understood them, he will acquit us of exaggeration. Anthropology then, or the science about man's place in nature, is the craft for sinking a human being over head and ears in brute matter.

From the elements already given, we proceed to formulate a similar definition of the men who are adepts in this anthropological craft. The definition has already been formed,—præformata, as they say in theology,—and we cannot do better than repeat it exactly. They are then men "without Christ, being aliens from the conversation of Israel, and strangers to the testaments, having

no hope of the promise, and without God in the world." The original Greek word, which is translated "without God," is ¿ðɛnt, athei, whence we take the word "atheists." And, since God is deposed, of course man is neither the end nor glory of this material universe; he is a mite upon this little globe; there is a plurality of worlds, and those big stars beyond have their own little mites and groveling parasites—all unknown. Let us listen to an evangelist:

"The general acceptance of Darwin's theory, which we may watch progressing around us every minute to-day, implies a complete bouleversement of anthropocentric ideas [i.e., of Christian and rational ideas, which make man the centre and end of this world], a total change in our human conception of our own relations to the world and the universe, which must work out for ever increasingly wide-reaching and complex effects in all our dealings with one another and with the environment at large. There is no department of human thought and human action, which evolutionism leaves exactly where it stood before the advent of the Darwinian conception."

Candidly, we do not think that this is an extravagant boast for the enthusiasts to indulge in. They have met with remarkable success in shutting off the light from God, the soul, immortality and morality. No wonder the popular instinct felt there was a scandal somewhere, and the popular passions came under the spell of a powerful charm. Darwin himself was surprised at his success; but that was only because the hidden charms of his theory were not new to himself. Carlyle tells us that unbelief had got into the Darwin blood, grandfather, father and son all being atheists.

V.

A philosopher was called for, and there he was—at the call—a born metaphysician. Herbert Spencer had already been elaborating his "Synthetic Philosophy" when Darwin came forward in the biological field with his "Origin of Species." Spencer was perfectly worthy of his profession as an English philosopher. In positive qualities and negative alike he was and is thoroughly English. The positive excellence of the English mind is to be practical, to deal with facts, and always to apply the "rule of thumb." In this respect Mr. Spencer does not fall behind the average of his race; his pages bristle with facts. The negative eminence of his mind is to have an inborn aversion for putting a paragraph into the form of a philosophical thesis, or thinking out a page by

¹ Ephesians, ii., 12.

² Grant Allen, Charles Darwin, etc., ch. xii., n. 198.

logical steps; and in this respect Spencer distinguishes himself in biology. In this field he is as genuine an Englishman as Darwin himself—a strong comparison! Philosophy and logic were Spencer's profession, and the results of other men's observations raked in and heaped up immoderately furnished him with the materials. Observation, on the other hand, was Darwin's profession, and logic was a sort of gum or solder with which he pieced his facts into a pattern. If we were to strain a little the meaning of terms, we might say, with Grant Allen that Darwin practised inductive logic, aiming at large principles out of small facts; and Spencer practised deductive logic, which argues downwards from large principles to particular conclusions. This gives us occasion to tell a little story, on the authority of Dr. G. Romanes, who was a kind of Boswell to the great observer, Darwin, and is, of course, bound by the courtesy of the profession to the metaphysician, Spencer. In a review of Mr. Allen's "Charles Darwin," Mr. Romanes says:

"Mr. Allen, we think, is too fond of comparing the work of Darwin and Spencer, and when doing so appears to attach an altogether undue merit to what he calls the 'deductive' as distinguished from the 'inductive' method. The work of these two great Englishmen is so unlike that, even though it has been expended on the same subject-matter, it always seems to us a great mistake to compare them; we might almost as well seek to compare the work of a historian with that of a poet. 'What an ex-tra-ordinary wealth of thought that man has!' was observed to the present writer by Mr. Darwin; "when I first read his (Mr. Spencer's) 'Principles of Biology' I was speechless with admiration; but, on reading it again, I felt in almost every chapter: why, there is here at least ten years' work for verification!' Now, (continues Mr. Romanes), this is surely a sound judgment, and one, moreover, in no way disparaging to the genius of Mr. Spencer." 1

No, of course not! We should not consider the charge of perpetrating true poetry to be a disparagement to any man's genius. In fact, it is a special genius of its own. And it is certainly Mr. Spencer's glory in his attempts at philosophy.

And, as there is no place for a disparaging comparison between Darwin and Spencer, so neither should there be any invidious comparison between Mr. Romanes' view on induction and Mr. Grant Allen's equally profound views on deduction. As every one knows, deduction is the logical process by which we argue from known premises to hitherto unknown conclusions; while induction is a preparatory performance whereby, in questions of physical law and phenomena, we gather particular facts into an ex-

¹ Nature, vol. xxxiii., 1885, p. 147.

haustive general law; and that law, once rightly inferred, can then pose as the ascertained premise for a deductive argument. Two gentlemen who uphold the respective merits of these essential mental processes need never be considered to disparage one another.

Accordingly, Mr. Allen is right, if, when extolling deduction, he means to restore reason to a right use of its powers in the field of evolution. Deduction has felt it, for instance, like a kind of paralytic stroke to have the "unknown" postulated and posited as the universal premise of all philosophy, or as a premise to any argumentation under the sun, except among fools or children. Deduction rebels against names being used as a blind to logic, or against terms being silently assumed to cover contraband assumptions that have never been proved, as when "simian characters," "acquired" human characteristics, and other such phrases by the score, are made to stand for a proof that human characters are simian, or that they have been acquired. Yet this is all the demonstration to be found in entire books, or entire departments of recent scientific thought.

On the other hand, who will dare to slight induction? Is it not the gift of "practical scent" that leads a discoverer or an inventor like a faithful terrier to his quarry? Both of the gentlemen before us admit the superior inductive cast of the English intelligence. Mr. Allen apologizes for it: "The English intelligence in particular shows itself, as a rule, congenitally incapable of appreciating the superior logical certitude of the deductive method. Englishmen will not even believe that the square on the hypothenuse is equal to the squares on the containing sides until they have measured and weighed, as well as they are able by rude experimental devices, a few selected pieces of rudely shaped rectangular paper." Mr. Romanes glories in it: "If any one truth more than another is necessarily and forcibly brought home to the intelligence of a biologist—be he 'English' or otherwise—it is the truth that in his science it is safer to cut out his materials in the way of experiment than it is to build up his propositions in the way of deduction. Therefore, it is not without good reason that a proved 'soundness' in this way of inductive research should be regarded as the best title to a place among men of science as distinguished from men of letters. And," continues Mr. Romanes with emphatic devotion, "long may it continue to be so!"

There is no fear but his devout aspiration will be heard. It is all "soundness"; the whole science is "sound" all through; sound pieces of flesh, sound bones, sound old skulls, for which, not excluding living skulls, and brains, and intellects, and souls, the advanced German thinkers send over metric devices—anthro-

pometric, craniometric, psychometric—to measure and to weigh all human relics, lives, sentiment and intelligence. The mens sana in corpore sano has now a new meaning; it signifies a sound mind, good and solid, in a sound body, made plump and comfortable by hygiene and no care for eternity. This is the class of men whom St. Bernardine of Sienna (if we mistake not) pictured graphically when he said, alluding to a certain domestic animal to be found in most people's houses: "You might offer him the post of king or emperor; he would still prefer his bone!"

In brief, the philosophy invested in the whole theory is that of a concept framed to suit the aspirations of a mind materialized. Observe, it is only a concept, and therefore needs no premises; just as if a dog wants a bone, he calls for no premises to introduce Says the eulogist of Darwin: "Evolutionism, as now commonly understood, may be fairly regarded as a mode of envisaging to ourselves the history of the universe, a tendency or frame of mind, a temperament, one might almost say, or habit of thought, rather than a definite creed or body of dogmas. The evolutionist looks out upon the cosmos as a continuous process unfolding itself in regular order in obedience to definite natural laws." And speaking of the fight with theologians, the same writer tells us how a "concept" swept the enemy from the field: "The 'argument from design' had been immemorially regarded as the principal buttress of orthodox thought [to prove the existence of God]. Theologians had unwisely staked their all upon the teleological dogma, and could ill afford to retire without a blow from that tenaciously defended buttress of their main position. Hence, the evolutionary concept had its hardest fight to wage over the biological field; and when that field was once fairly won it had little more to fear from banded preconceptions and established prejudices in any other portion of the wide territory it claimed for its own."

One might ask whether, now that science feared neither God nor men, neither theology nor philosophy, it had not reason to fear itself and its own sound facts? Rudolph Virchow, whose authority is unimpeachable in the school, will tell us: "Let me remind you at this point that natural science, as long as it remains such, works only with existing objects; a hypothesis may be discussed, but its significance can only be established by producing actual proofs in its favor, either by experiments or direct observation. This Darwinism has not succeeded in doing." Later on, in the same address, he continues: "Twenty years ago, many things were supposed to be known when people were really ignorant of them. We have made this supposed knowledge the object



¹ Grant Allen, Charles Darwin, nn. 180, 190.

of scientific tests, and natural science has now really taken possession of its wide domain; and we can say that much of what was formerly asserted as true is no longer admissible. It was supposed by faith, but it never belonged to science."

If we take an eminent French anthropologist, we find the same ominous cloud overhanging the bright prospects of the Darwinian theory, which opened its eyes (dear creature!) some thirty-four years ago, to the mists and exhalations of so auspicious a morn. There is no mistaking Dr. Topinard's creed. He says plainly: "Let us not blush for our ancestors; we have been monkeys, as those formerly have been reptiles, fish; nay, worms or crustaceans." These are the last words of an address, in which he pits against each other the conflicting opinions of Haeckel, Gaudry, Cope, Vogt, and the opinions of Vogt, in particular, who conflicts liberally with himself. Dr. Topinard's own conclusion is this: "The philosopher has said truly: 'Man is an intelligence (he means a thinking brain) served by organs.' We have descended then from the monkeys, or at least everything appears as if we had descended from them. From what monkey known or unknown? I do not know; no one of the present anthropoids has assuredly been our ancestor. From several monkeys or a single one? I do not know; and also do not know yet whether I am monogenistic or polygenistic (ie., from several lines of ancestry or from a single one). Whatever may be the origin arrived at, that place, believe me, will be as enviable as you could desire. At the origin. towards the beginning of the Miocene, perhaps, monkey and man were but one; a division takes place, the fissure has grown, has become a crevasse; later, an abyss with talus more or less scarped, like the cañons of the Colorado—an abyss which widens every day under our eyes."2 This means that every day man is seen with greater and greater distinctness to be far off from the brute. Thus we see that his evolution has settled down to be, without qualification, an exercise of materialistic faith, having for its motive of credibility the indomitable appetite for a materialistic life. And as to organic evolution farther down in the theory, or the development of living plants and animals from non-living, brute matter, that fond concept has never yet pretended to be emancipated from the servitude of blind belief; no, not belief, but impotent "expectation," where Professor Huxley left it years ago: " If it were given me," he said, " to look beyond the abyss of geologi-

³ Dr. Paul Topinard, lecture delivered March, 1838, in the Ecole d'Anthropologie of Paris. See Smithsonian Report, 1889, pp. 693-4.



¹ Opening address delivered before the 20th general meeting of the German Anthropological Association, Vienna, August 5, 1889. See Smithsonian Report, 1889, pp. 563, 569.

cally recorded time to the still more remote period when the earth was passing through physical and chemical conditions, which it can no more see again than a man can recall his infancy, I should expect to be a witness of the evolution of living protoplasm from non-living matter. That is the expectation to which analogical reasoning leads me; but I beg you once more to recollect that I have no right to call my opinion anything but an act of philosophical faith."

VI.

One point more remains and that is the place of anthropology in Education. It has been proclaimed, and truly, that the art of education has felt "its progressive influence." And we have been told by a Catholic biologist of eminence that the clergy should be versed in biology.

If the science is taken in the sense of being a specialty, then, as a matter of course, any one who has time and taste, whether he be lay or clerical, has the franchise of this study as of any other. Great talents of irregular formation have been squandered on the pursuit; and it is to be hoped that great talents will not be wanting in the cause of truth and divine faith, which, purificans corda eorum, cleanses, purifies and elevates the hearts and minds of men. Amongst the men of our day who are gifted with a scientific bent, almost all have gone adrift.

If the science is to be recommended to the clergy in particular, it can be only in the same way as the study of gnosticism once upon a time, of the Albigensian heresy, of Protestantism, or of any other parasitic growth of error or heresy which has fastened on Christian belief and moral life, has been commended to the attention of the custodians of the faith. Without a doubt the athesism of materialistic science is the error, the heresy, the idolatry, the cancerous growth of our day.

But in no sense, whether for clergy or laity, can biology or anthropology be recommended as an integral element of general education. It has not the educational virtue required. It is not exact, definite, formative of those habits of thought, which will persist in the useful and professional occupations of life. There is nothing more inexact and wavering, yet withal more exacting on the time and genius of a mature specialist, than the biology and anthropology of the present epoch. When these sciences shall have passed through the vagaries of a very wild youth, their results will be seen to coincide with that well-established anthropology, which is laid down distinctly and consistently in the Sacred

¹ Critiques and Addresses, "Spontaneous Generation."

Books. The physical, intellectual and moral characters of man and the races of men, the origin and term of mankind in this world, will never be found otherwise than as exposed in the anthropological text-book, which is so long in possession of the field,—the written Word of God.

A scientific temper, which means a scrupulous and rigid exactness, has its advantages in education. But it is the outcome of an exact science. Erudition, in measure and degree, belongs to a liberal and fundamentally broad education. But there is no degree or measure that can be made to fit a place in education for atheistic "anthropologies," immodest "physiologies," prurient "anatomies," any more than for the thinly veiled or utterly undraped indecencies which are now so commonly allowed admission, under the name and pretence of "art" and "culture." The art of true education must practice what it teaches—apply right names to good things, and deal with nothing else:

Populumque falsis Dedocet uti Vocibus.

Let the words of Professor Huxley be the epilogue to our historical sketch. Enthusiast as he was for his craft and its interests. he has recanted not a little, in favor of art and letters as true educational powers of the human mind. Speaking at the Royal Academy banquet, 1887, he recognized the "great truth that art and literature and science are one, and that the foundation of every sound education and preparation for active life, in which a special education is necessary, should be some efficient training in all three. I see great changes," he went on to say: " I see science acquiring a position which it was almost hopeless to think she could acquire. I am perfectly easy as to the future fate of scientific knowledge and scientific training. What I do fear is, that it may be possible that we should neglect those other sides of the human mind, and that the tendency to inroads, which is already well marked, may become increased by the lack of the general training of early youth."1

THOS. HUGHES, S. J.

¹ Nature, vol. xxxvi., 1887, p. 14.

THE INTELLECTUAL BASIS OF THE SUPERNATURAL.

THE idea of the supernatural order is the one Catholic idea which even which even many who study theology apprehend with more difficulty and less distinctness than any other. The dogmatic statements comprehended in it, are indeed, singly understood and believed. But their foundation in ultimate truths and the principle which unifies them and connects them with other dogmas is not always clearly and distinctly understood; and it is difficult to make it perfectly intelligible to those who have not thought and studied more deeply than is common. The principal reason of this lies in the very common lack of metaphysical insight into those first principles of rational theology from which alone an intelligent apprehension of the reasons of the doctrines taught by authority and received by faith can be gained. Fides quaerens intellectum, when it passes beyond positive theology, must continue its seeking by means of philosophy. The doctrine of the supernatural can only be profoundly understood by means of that highest metaphysics which reasons on the essence of God, the nature of creatures who have received from the Creator a specific intellectual and moral being, and the essential relations between these two correlated terms. Every one who knows what the Catholic doctrine is, knows that there is a supernatural order in which God has collocated angels and men. This is an order of initial grace and consummated glory. Grace elevates a rational being above his natural condition, giving him a new principle of life and action; and it is a gratuitous gift. This elevation is the exaltation of its subject to a higher destiny, a more sublime end, viz.: a beatific union with God. He is placed in a supernatural state, and brought to a supernatural end. Nature, in this connection, denotes all that is given to creatures purely and simply by the creative act. being which is above nature denotes primarily God, and secondarily that participation with God which He imparts to a rational creature over and above the specific being which he has received by creation. The supernatural order is an order, in which rational creatures are raised above all created nature. No created being has a natural capacity to tend toward God by acts which prepare him for the immediate, intuitive vision of the essence of God, and the beatitude which is caused by this contemplation. Neither angels, nor man in his original integrity, nor the perfect humanity of Christ, have had such a capacity in their nature. Furthermore, the most clearsighted theologians extend the proposition still further, by affirming that supernatural grace elevates its subject above all nature that could be created; Super omnem naturam creatam atque creabilem. The purport of this proposition is: that it is the property of the divine essence alone to have itself, as intelligible, the object proportioned to intelligence in immediate, intuitive contemplation. This relation, so to speak, of God to Himself, under the concept of the intelligible and intelligence, is like self-subsistence, absolute being, infinitude, eternity, and other divine attributes, incommunicable to any created essence. To create a being, therefore, who, by his essence and nature, should have the divine essence as his connatural, proportionate, immediate intelligible object, would be to create another divine essence, another God; which is a contradiction in terms.

This is the thesis; which cannot, however, be assumed as certain without proof. According to the formula of St. Thomas, the difference between the being of God and the being of creatures can be expressed in these terms. The being of God is esse irreceptum, the being of creatures is esse receptum; the question is therefore, whether the natural faculty of intuitive vision of the divine essence is predicable, like self-existence, only of esse irreceptum, or is predicable also, as possibly communicable to the esse receptum of some species of intellectual nature. It may be argued that God does communicate this faculty, by a supernatural grace to intellectual natures, and therefore, that he could possibly communicate the same as a gift to the essential nature of similar but higher species. To this it may be replied, that such a communication can only be made to an intellectual nature, and that this nature must be first constituted in its essence and nature, before it can be a real term. substantially separate from the divine substance, and receptive of the divine communication producing a beatific union of mind and will with the mind and will of God. The hypostatic union of divinity and humanity in Christ pre-supposes a human nature, constituted in all its integrity, soul and body, sense, intellect and will, in order to have two terms, two natures, subsisting in one person. This is the real, actual mode of the Incarnation; and the actual mode of the inferior union of the blessed with God is by the union of intellectual beings, having their own proper faculties of intelligence and will, in an order essentially below the divine, with God, by supernatural grace. It is reasonable to think, that supposing the divine decree to effect the Incarnation in the specific human nature, and to give the beatific vision to angels and men, the mode of accomplishing this decree is not merely determined by the absolute will of God, but by a metaphysical necessity. It is reasonable to believe that God in giving the subsistence of a Divine Per-

son to the human nature of the Son of Man, so that the man Jesus is truly God has given the highest possible gift of love in the most perfect possible way. The Infinite Good in diffusing and communicating itself has attained the very apex of metaphysical possibility, has fully expressed the divine idea in the masterpiece of infinite wisdom and almighty power, the Incarnation of the Word. Now, the human intellect of Jesus Christ has not the faculty of the beatific vision or the right to it by his human nature, but by reason of his divine personality, through a supernatural communication of the subsistence of the Word to the distinct substance composed of soul and body which constitutes that individual humanity assumed by the Word. If any creature possessed naturally the intuitive vision of the essence of God, and the natural right to beatitude, he would have by nature that which the human nature of the Lord Jesus Christ only has supernaturally. Such a supposition appears to be incongruous, not only to the actual order of the Incarnation, and the actual order of elevated nature in angels and men, but to any conceivable or possible order. such an imaginary order of intellectual nature, all who were created in it would be by nature sons of God, and not sons by adoption; a prerogative which belongs only to the Only-begotten Son of the Eternal Father. It is desirable to prove this metaphysically, if it can be done, and I think it can be done, even if the present effort should fail of success.

Aristotle, in his unequalled masterly manner, proves that in God intelligence and the intelligible are identical. This followed necessarily from the first principle of the Aristotelian and Catholic Theodicy, that God is most pure, simple, and perfect Act. The intelligible essence of God is Ipsum Esse Subsistens, in the total plentitude of being, intellectually self-conscious in an absolute equation of intelligibility and intelligence. If the divine, intelligible essence were naturally present to a created intellect, as its immediate and proportionate object of cognition, it would have this essence intrinsically within its own essence, and therefore also, by necessity, the inseparable intelligent essence of God. The communication of the divine essence is precisely what constitutes the eternal generation of the Son from the Father, and is possible only within the Godhead, but impossible as an act terminating in a creature. The intelligible and intelligent essence of God is essentially Esse Irreceptum. To suppose this esse received into a finite nature, which would be a mere receptacle of the divine act, having no specific intelligent act proper to itself, is unmeaning, pantheistic, self-contradictory. A separate, substantial intellectual nature must have its ideas, cognitions, possible and actual intelligence, self-consciousness, its total spiritual life, to itself, as its propriety, its specific in-

dividual mode of existence. Subject and object must be proportioned to each other, and correspond one to the other, in a perfect adequation. Aristotle and St. Thomas teach that in cognition the object must be appropriated by the subject, brought within its circle, and made in a sense one with it, so that anima rationalis est quodammodo omnia. Objects extrinsic to the mind, which cannot be brought ontologically and physically within it, must be made present to it ideally by species which represent them, and through which the objects themselves are known. Now, an intellectual nature cannot receive a proper and adequate species of an object wholly out of proportion to its capacity, transcending its utmost limit. If the created intellect which is imagined to have a natural intuition of God has no proper species or idea of its own representing the essence of God, then it has no nature and existence of its own, and it is God alone who thinks and acts in it as a mere receptacle or reflector of His light. If it has such a proper and adequate idea of its own, in the imaginary case, it is equal to God, it has a derived and created divinity, a proposition which is heretical and absurd. The created intellect is a finite subject and must have a finite connatural object. It cannot take into itself the infinite Esse Irreceptum. Its own esse is esse receptum, and therefore only that which has esse receptum can be its connatural, immediate object. The created intellect, therefore, raised to its highest power, cannot have an intuitive vision of the Divine essence, but only that mediate, indirect insight which comes by light reflected from created objects. This is the rational basis of the revealed truth, that the elevation of angels and men to an order, in which they are destined to the beatific vision of God, is wholly supernatural, a purely gratuitous grace from God. The specific character, the life, the destiny, and the ultimate felicity of rational beings is chiefly in their intellectual faculty and operation. This is so both in the natural and in the supernatural order. In the latter order faith, the radical principle of the life of grace, is in the intellect, as its subject, and the contemplation of God constitutes the supreme beatitude of the saints in heaven.

The consideration of the intelligible object and the intellectual operation is, therefore, the pivot upon which turns the decision of the whole problem of the difference between the natural order and the supernatural. When we inquire what cognition really is in its inmost nature, what is the cognoscitive operation and the distinct principle from which it proceeds, we find a great obscurity hanging over this topic of investigation. We have an apprehension of it from our conscious experience. But the metaphysical analysis of our faculties and operations is not an easy task. Children try to find and take hold of the nearest end of a rainbow, and our minds are similarly baffled in striving to seize hold of the elusive phe-

nomenon of cognition. It is said that a subject becomes cognoscitive when it can receive into itself some other form besides its own. But this is only stating a condition of cognition and not defining its nature. Natural and artificial mirrors receive the external objects before them into their own proper substance by a representation which gives us a very good analogical similitude of ideal representation. But this is not cognition. Again, we are told that the immaterial nature of soul makes it fit to return upon itself, and the freedom from dependence on matter for subsistence and operation enables spirit to return on itself by a perfect return. Very good! but this gives no insight into the sensitive or rational soul, or into sensible and rational cognition. We have our conscious experience, in which we know and feel what cognition is, and infer what the soul is, but our reflex concepts are obscure and confused, our intuitions and inferences are not to be adequately expressed in language which has only the x and y symbols of unknown quantities at its disposal.

However, as x and y can be used for algebraic operations, metaphysical terms of like nature can be used in legitimate metaphysical reasoning. Spirit, animal soul, sensitive cognition, intellectual cognition, are impenetrable by reflex analysis, but we have the inner sense of their reality, and can reason about their qualities and modes of operation. In the Aristotelian psychology we have a satisfactory theory of the organic and inorganic operation of the human cognoscitive faculties. It is familiar to students of philosophy, and need not be described. In regard to pure spirits, we cannot have so distinct an apprehension of their object and mode of cognition. In a general way we can perceive that they correspond to their intellectual nature. The whole supersensible world of ideas and spiritual beings is open to them and their mode of cognition is far superior to the human mode. How they have cognition of the sensible world without having senses is very obscure. They have this knowledge most perfectly, without any doubt, but the mode of it is indistinctly conceived by us and it is irrelevant to our present topic. Prescinding altogether from any changes in the natural condition of angels and of man, consequent upon their supernatural destination, the fall of some angels, the fall and restoration of man, we may consider the purely natural order as a hypothetical state. That is, supposing that God should create rational beings in a purely natural condition, for a purely natural end, what does their intellectual and moral perfection consist in. and what is the state of ultimate perpetual felicity which to them is attainable? There would necessarily exist a considerable specific difference between the conditions of pure and of embodied spirits. Besides, it is impossible for us to conceive how many different species of angels, and of beings generically similar to man.

God might, if he willed to do so, create and leave in the natural order. Such considerations may be put aside; for, in general, there is a similitude among all rational beings. The adequate object of intellect is being in all its latitude. For a finite intellect, the proportionate object is being, in a restricted sense, corresponding to the specific nature of the subject. It is its degree and mode of intelligence which determines the perfection and felicity of the intelligent being essentially. For all alike, the immediate, intelligible object is restricted to that being which is esse receptum. Thus, a solution of the problem, what kind of intellectual and moral perfection and felicity is possible without the intuitive vision of God, or any supernatural endowments, will be applicable to all conceivable instances. It is not difficult to imagine an intellectual perfection of indefinite extent, by taking a starting-point from the highest achievements of the human mind in its present inferior conditions. Remove all impediments to the widest acquisition of knowledge in the vast field of the universe. Remove all impediments to thought in the world of ideas and the contemplation of metaphysical truth. Remove all infirmity, all servitude to lower necessities, all limitation of time and distance; give the natural powers and faculties an ideal development, and we can imagine intellectual life and activity raised to such a high plane that all the combined wisdom and science of the ages, in comparison with those of such a high state, is like the babbling of infancy in comparison with the wisest and most eloquent language of educated men.

The moral perfection of a rational being follows from his intellectual perfection. Being, truth, goodness, are transcendental phases of one idea. The intelligible and the good are one. The sanctity of God is the unity of intelligence and will in the contemplation with complacency of the best, i.e., the divine essence. This is also the beatitude of God. The complacency of the will is inseparable from the contemplation of the intelligence. The beatitude of this act of complacent intelligence excludes all possibility of desiring and choosing any increase or diminution of itself. The perfection of intelligence excludes all possibility of false judgment respecting the congruity of operations ad extra, in the free exercise of the power to communicate being by creation. The unity of will with intelligence precludes all possibility of choosing to do anything which the divine judgment does not approve as good. Unerring intelligence is the origin and source of the absolute moral perfection of God. In creatures, intellect gives direction and law to will. The more perfect is intelligence and reason the more fixed and invariable is the rectitude of the will. The connatural object of intellect is truth, which is one with goodness and being. Falsehood, evil, and nothing are one and the same negation of truth, goodness, and being. Intellect and volition cannot have

them as a positive term. They can only fall off from their real terms in part, by their own defectibility, into these negations, and return by a backward movement, toward the original nothing out of which they were created. Their peccability lies in their defective being. The defect is primarily in the intellect, which is liable to the illusion of a false judgment respecting the good which is eligible and preferable. A rational creature cannot assent to falsehood as falsehood, but only as under a delusive appearance of truth. We cannot choose evil by reason of its evilness, but only a: presenting a delusive appearance of a good, eligible for the advantage and happiness of the subject. Now, when defectability is supplanted by unerring perfection of intelligence and reason, there can be no such illusions to tempt and deceive, and, consequently, no motive for any evil, i.e., immoral choice. The blessed in heaven and souls in purgatory have their contemplation immovably fixed upon God; these by the vision of His essence; those by faith and vivid apprehension; and they know him as their supreme good, with an equal determination of the will, which must follow the intellect. Therefore they are immutable in the love of God, and impeccable. In an inferior order, a rational creature made perfect in his natural state has no principle of moral deviation in him and no motive which can draw him away from rectitude. An intelligent, virtuous man, who is in full possession of his reason and contented with his condition, will not leap into the sea from a ship, as a man who is in great suffering, who is desperate, or mad, may do. The state of perfection in rational nature necessarily brings with it perfect felicity. And besides the happiness of contemplation and knowledge, there are many other ways in which the exercise of all the active powers and the enjoyment of the profusion of good things in the universe, especially the society of similar beings bound together in friendship and innocent, rational love, might fill up the measure of happiness to over-There still remains to be considered the relation of rational beings in such a state to God, and the manner in which they can and must find their highest good in the knowledge and love of their Creator and sovereign Lord.

The human reason attains to a knowledge of God by its own proper mode, when there are no impediments to hinder the due activity of its powers, and favorable conditions exist for their development and exercise. The actual state of mankind is not, however, anything approaching to the ideal of human nature in the possible perfection which it might have in another order of Divine providence. What pure human philosophy has attained in a few instances, shows what could be attainable, in an ideal condition, in a better environment, under an order in which the latent capacities of human nature were fully developed, and its organic

constitution, freed from the law of mortality, made perfect and incorruptible. The intellectual nature and operation of angels are far superior to those of mankind, especially as it exists in a lapsed condition. Their natural knowledge of God through his works, especially as his attributes are reflected in the mirror of their own intelligence, is clear and sublime, far surpassing the highest human metaphysics. Rational beings of every kind and species, when their faculties are developed and their knowledge made perfect, must have an abstractive contemplation of God of a very high From knowledge naturally follow love and worship. There is a perfect concord between the creature and the Creator; not the friendship which results from that sort of equality which subsists between the adopted sons of God and their Father, but the amicable relation of loval, favored subjects toward their sovereign. It does not seem reasonable to suppose that the actual and constant enjoyment of life in a state of purely natural beatitude principally consists in the happiness of an intimate communion with God. Their happiness is mediately and indirectly from him and in him by a participation in his gifts. But it is crowned and elevated by their very perfect knowledge and love of God as the author of nature and the supreme good. In this way Plato, Aristotle and other pagan sages estimated the highest perfection and felicity of rational beings. Beyond this there is no exigency and no capacity in rational nature, and when it is possessed as a secure inalienable right there is no sense of any lack or aspiration after a higher good. If there were, it would prove an exigency in nature for the supernatural. If God implanted this exigency, his goodness would demand the grant of the means of satisfying it. grant would be due to nature, and no longer a gratuitous grace. Every nature must have its end and the means to it within its own limits. A natural destination to a supernatural end is a contradiction; it is a notion which subverts the true idea of the supernatural.

We have no means of knowing whether God has created or will create any species of rational creatures whose original destination is within the natural order. We can only make conjectures which are plausible, or, at best, may be regarded by some as probable. Natural beatitude does exist, however, as an appendix to the felicity of the blessed in heaven. Moreover, this is that part of their original heritage, which is left to those children of Adam who are deprived of the right to the kingdom of heaven by original sin, and who die without any personal, actual sin which deserves the forfeiture of the final beatitude which is due to nature. Created and destined for the supernatural order, they have fallen down into the order of nature through the sin of Adam, in whom the human race forfeited the gratuitous gifts originally conferred on it in the

person of its head. Those who have not been restored in Christ, and who have not incurred any demerits of their own, are ontologically and substantially what they would have been if they had been originally created and constituted in the state of pure nature. The intellectual difference, which is the basis of the entire difference of state between these human beings and those who are in heaven is this: they cannot see God by an intuitive vision of his essence; the others have this vision, which is beatific in a supernatural mode. It is impossible that a creature should have a faculty for seeing God. The Divine essence infinitely transcends every created faculty of cognition, and cannot become an esse receptum communicated to a finite essence.

It would seem from this that a creature cannot be made capable of the intuition, the facial vision of God Nevertheless, it is of faith that beings subsisting in the angelic and in the human nature are elevated by grace to that supernatural state in which they behold God face to face. This is one of the mysteries of the divine revelation. It would be incredible if it did not have the veracity of God as the guarantee of its truth. Is it possible to obtain any insight into the mode by which the created intellect is made capable of an act so far above the highest reach of nature? In a question of this kind more reliance is to be placed on mystical than on speculative theology. Saints who have ascended the heights of contemplation can see farther into the mysteries of the faith than metaphysicians. The great doctors and other holy and enlightened teachers of a minor order are nevertheless, metaphysicians and theologians, as well as mystic contemplatives. Therefore, they bring metaphysics and theology into their service when they attempt to explain the mode of supernatural vision in which the saints in heaven gaze upon the splendor of God. They are all agreed and teach one doctrine. This is that the essence of the beatified is united with the essence of God, and his native powers with the active principles of intelligence and volition in God. In our Lord Jesus Christ the union is hypostatic and the Divine Person subsists in the human nature. The human substance in its essential, specific integrity is not absorbed into the Divinity or blended with it, but remains as a distinct and perfect nature. In every other beatified being the nature remains in its own subsistence, existing in its proper hypostatic completion. The union is, therefore, not hypostatic, but an inferior kind of union. Nevertheless, it gives the creature a kind of equality with the Divinity, effects a certain degree of deification, an apotheosis, so that the only-begotten Son of God becomes one among many brethren sons of God by an adoptive filiation. This elevation of rational creatures is ineffable and inconceivable by us in our present state. It is an

inscrutable mystery, which is believed by divine faith in the word of God proposed to us by the Catholic Church.

The wisdom of the doctors cannot go beyond the statement of the simple fact of the beatific union which has just been given. The attempt to penetrate more deeply into the mystery would be futile. The concept must come from an experience which is impossible in this life; and without this concept derived from consciousness, an angel who should attempt to explain the intuitive vision of God could not be understood. We can understand only so far as this; that the object of faith which is obscurely apprehended by means of analogical concepts and figures of speech, is immediately and clearly apprehended, as it is, in its intrinsic reality and intelligible truth, by the beatified spirit. The same contemplation and complacency which in God terminate on his infinite plentitude of being in a comprehensive adequation, are in him in a diminuted quantity which is greater or less, in proportion to his higher or lower degree. It is not comprehension even in the highest, for the finite cannot comprehend the infinite. Creatures are like greater or smaller lakes and vessels of clear water reflecting the heavens. They are filled with God to the utmost of their capacity, but their capacity is variable, and always finite. It is not easy to understand this; viz., that an intelligent spirit can see God, in God, immediately, without an intervening medium, and vet in a finite mode. It is nevertheless certain, that, as St. John of the Cross teaches, the spirit who sees God the most perfectly, sees most perfectly that he is incomprehensible by any intelligence except his own.

Perhaps an analogical illustration may diminish, though it cannot remove the difficulty. The sun is visible to us, but our vision is not comprehensive. The vision is enhanced by the use of a telescope. If it were possible to approach safely to a nearer distance, it could be seen more perfectly, and it is conceivable that it might be seen to the whole extent of its visibility by a being endowed with a sufficient capacity, whose vision would become comprehensive. The whole sun is seen from a distance by observers on the earth whose capacity for seeing it is limited by more or less restricted conditions. It is not, however, wholly seen until our hypothetical observer has obtained a comprehensive view of it. So, say theologians, the least of the beatified spirits sees God, as to his whole being, but not wholly, that is comprehensively. The greatest among them sees God, as the very same intelligible object, but by a nearer and clearer vision. But he cannot see him totally, comprehensively, because his being is infinite, and the capacity of seeing, in the creature is finite. The vague and unthinkable notion of an absorption into the divine being, and an identification with it, belongs to heathen theosophy and has no place in Christian theol-

ogy. The countless royal progeny of the universal king, each one distinct in his individual being, reproduces the image and likeness of the Father, after the model of the Eternal Son; they rethink the thoughts of God, reverberate the mighty pulsations of his eternal love, and multiply by refraction the irradiations of his infinite light. Each one beholds, with an eye, which like the eagle's blanches not when gazing at the sun, the Unity and Trinity, the divinity united with the humanity in the Second Person, and the original archetype of all created things; and in the contemplation of the supreme good and the supreme beauty, the splendor of the divine perfections, shares with God in his beatitude. In the mirror of the Trinity, he sees all that is knowable and lovable in God and his works, incessantly, and without weariness. This repose of contemplation is not however a quiet of inactivity. The eternal repose of God consists with a perpetual interior vital action and with a continual activity whose term is extrinsic to himself. The repose and activity of the blessed is analogous, and imitative of the divine life. The natural life and the natural powers are not absorbed or made quiescent, but are exalted, augmented and perfected: in human beings not merely those which are spiritual, but also those which are corporeal and sensitive. Those blessed beings who live and reign with Christ are lords of the universe. This vast domain, spread out before them, which they can traverse at will, study and investigate at leisure, is all at their service. What we know of it now, which is very little, and what we conjecture, fascinates the mind, and this charm keeps astronomers fastened to their observatories through years and centuries, making a most laborious and slow progress in discovering the secrets of the heavens. What is the problem which the multitudinous orbs and nebulas are working out, what is the grand plan and final term of their evolution, transcends the capacity of the human mind to discover and to formulate into science. What then from this source alone, must be the delight of those exalted spirits to whom the whole domain is like an open and intelligible book!

The greatest earthly happiness has as one of its chief elements, society and friendship. The society of heaven embraces all the multitude of the angels and saints, bound together in celestial love and harmony. What are the employments which engage the activities of the blessed within their empyrean sphere and throughout the entire universe? We may imagine in some inadequate way, but cannot conceive, by any efforts of the understanding, except in an obscure and general manner what they are. This we know; that the portion of the children of God is life eternal, and transcends all that we can think or imagine. The perfection and beatitude of the children of God and co-heirs with the Lord Jesus Christ consists principally, in their supernatural union with God.

The intellectual basis of this divine, eternal life is in the capacity of beholding God, as he is, by an immediate, intuitive vision, for which they are made fit by the light of glory.

There remains only to be considered the intellectual basis of the inchoate supernatural life of faith in Christians, who are on the way to heaven, working out their salvation during the period of earthly probation. Salutary faith, hope, and charity absolutely require divine grace, and are impossible without it. Reason, by its native power, can rise to a natural knowledge of God as the author of nature. The human will, unaided by grace, can turn to God with a natural love. There can be natural virtues which are good moral qualities and habits and acts of natural virtue. The possibility, congruity, and actual concessions of the Christian Revelation can be proved and assented to, like any other rational truth or historical fact. Yet all this gives only the preamble of faith. The faith, hope, and charity by which the mind and heart turn toward God as the supernatural author, and move toward him as the supernatural end, differ specifically from the rational conviction that God is, that He is veracious, that His revelation is credible, and from a rational confidence in his goodness, a natural complacency in His perfections. Divine faith requires a special illumination of the mind, a special inspiration in the will, by virtue of which the intellect, determined by a voluntary and free act of the will, rises to a direct, immediate, and firm assent to the revealed truth on the sole motive of the veracity of God. This purely supernatural act of faith presupposes the rational judgment that it is reasonable to give this assent. But it is not its product, and is far from being a mere logical conclusion from the rational premises contained in the preamble of faith. It is the product of the action of the Holy Spirit and the concurrence of the human subject submitting itself to this gracious influence, and is the principle of a new and divine life. This elevation of nature is necessary in order to give the human subject a due proportion to its final destiny. is an inchoate glorification. All the activities and movements which are a preparation for its final consummation must proceed from the mind and will, elevated and empowered by grace. Faith. hope, and charity are habits and acts proceeding from the renovated nature. Faith is a light which, although obscure as compared with the light of glory, presents God and His revealed mysteries before the intellect in a more direct and vivid manner than reason can do. It is a twilight preceding the illumination of the light of glory.

The analysis of the complex process in which the mind and will are elevated from their natural activity and above it, and yet in harmony with it, into the higher sphere of divine faith, hope, and charity, is a most delicate and difficult operation. The greatest theologians, such as De Lugo and Suarez, differ from each other

on this point. Where and how the natural glides into the supernatural, many have attempted to explain with ingenuity and subtlety; but after all has been said there remains a mystery which baffles every effort to penetrate its obscurity. Those who have faith have an inner sense of experience by which they are able to apprehend in reflection its difference from any mere inference of logic or metaphysical judgment. Those who have passed in their adult age from a state of doubt or unbelief to one of firm, unwavering faith, after a process of inquiry and study, are conscious of having made a passage out of darkness into light, effected by something more than a mere process of reasoning. Others, again, who seem to have gone through the preamble and to understand the motives of credibility, stop short at the gate and do not enter. Some who eventually pass through the gate pause and hesitate for awhile at the threshold. They say that they perceive the reasonableness of believing, but yet do not fully believe; that they wish to believe and yet cannot determine themselves to an explicit, undoubting faith in the truth proposed to them on the authority of God. Afterwards, the light enters their mind, and a persuasive influence moves their will in a hidden mysterious way, and they believe ever after without difficulty or effort. But after, as well as before, this transition, they can go on, both by a philosophical and a historical method, to study every topic of the Christian demonstration, and to gain a deeper understanding of all those doctrines and facts in which they believe on the motive of the divine veracity.

This motive is the intellectual basis of a supernatural assent to inevident truths, e.g., the Trinity of Persons in which the One Divine Essence subsists, as evidence immediate or mediate is the basis of natural assent to self-evident and demonstrated truths. To sum up the whole matter, the creation and the ideas impressed upon it are the proportionate intelligible object of natural cognition, which contains a mediate, rational, abstractive cognition of God. God is the immediate intelligible object of supernatural cognition, together with his works as seen in him; and is the immediate credible object of supernatural faith. The intellectual basis of the supernatural mode of intelligence supposes and combines with itself the natural basis, elevates and augments it, and gives it perfection. The supernatural order is not a sequel of the natural order, nor due to any exigency of its principles, but a purely gratuitous concession of infinite goodness, a grace in the strictest sense. It culminates in the Incarnation.

There is the highest congruity in this order to the divine wisdom and goodness. Supposing the divine decree to create the universe and to bring it to its final term in Himself as final cause by an order of the highest congruity, in which good is communicated to the utmost degree of metaphysical possibility, God owes it to himself

and to his divine plan to establish a supernatural order. But the concession of grace is not due to any species or individual natures in particular. The vocation of the angels and of the human race was a grace. The assumption of the humanity of Jesus was a grace. As a consequence of grace, merit becomes possible in its subject by a free concurrence with the operation of grace. Where the merit exists and perseveres until the end of probation, or where there is an absolute promise of God to give grace and glory, a right of justice is created in the subject. But God remains perfectly free to withdraw grace which has been forfeited, to make his own conditions for receiving or regaining grace. He is also free to fill up his universe, if he please to do so, with rational creatures who are confined within the bounds of a purely natural order.

There are Catholic authors who have a very different conception of this whole subject. But they involve themselves in inextricable difficulties when they attempt to reconcile the conclusions of rational philosophy with the dogmas of faith. They are obliged to resort to ingenious and minimizing explanations of certain decisions of the Holy See in order to make their theory appear to be tenable and orthodox. They have the current teaching of theologians, with an increasing unanimity, against them. Their peculiar opinions, an inheritance from an earlier and less advanced stage of doctrinal development, are tending to become obsolete. Those who are well read in theology will understand at once the scope and purport of these remarks, and it is not necessary to furnish to others any clearer explanations on the present occasion.

Those who are seriously engaged in the study of theology and philosophy, and in the effort to harmonize the two sciences in a complete synthesis, will find that a clear and correct conception of the basis and principles of the supernatural order will throw a flood of light on the whole area of their thought and study. A host of misconceptions and difficulties are scattered like mists before the rays of this light. The noble effort to vindicate the ways of God. to man, and to show inquiring minds the reasonableness of the Catholic Faith, is greatly facilitated. Fides quærens intellectum finds the object of its search and fills the mind with admiration of the views it has gained of that eternal plan of God. This is a plan which only His infinite wisdom could have devised, which only Hisalmighty power can execute and bring to its accomplishment in the kingdom of the heavens. Human reason, left to itself, could never have guessed at, and when it is proposed to belief, cannot demonstrate, its possibility. But, enlightened by faith, it can understand, in a measure, its reasonableness and grandeur.

AUGUSTINE F. HEWIT.

VOL. XVIII.-41

THE POPE'S LETTER TO THE AMERICAN BISHOPS ON THE SCHOOL QUESTION.

EDITORIAL NOTE.

O the advocates of Christian Education, it may seem strange that our REVIEW was not more aggressive in the cause of our Catholic Schools during the recent controversy which the following important Papal document is intended to terminate. No one, we trust, doubted for a moment, that we were, head and heart, with the episcopate of the country. But we deprecated most strongly this unnecessary controversy, and did all in our power to prevent, and after its inception, to quietly terminate it. Inopportune truth is sometimes more hurtful in its effects on men than falsehood. It is true, that though wars between men may cease, wars between great principles cannot cease. But there may be "suspension of hostilities." The time to give battle is an important question for every general and no more inopportune time could have been selected for our educational civil war. Now that it is over,—as we hope,—we are astonished at how few principles were involved in the whole struggle.

It should be a source of gratification to the friends of this 'Review, that we pursued as we advised, a pacific course. We declined to publish an article, written by one of the most erudite theologians of the age. We were constrained to do so, because though the learned writer professed to treat of great educational principles alone and not mingle with popular controversies here, yet we felt that people would certainly apply these principles to present contentions, and use his authority as well as that of the REVIEW, to enforce their views. We subsequently declined to publish an exceedingly able paper on the opposite side and otherwise endeavored to terminate the controversy. But, as we feared, it swept onwards. It soon passed the confines of reason into that of feeling. Relations between old friends appeared somewhat strained by it. Now, that the voice of supreme authority has quelled the storm, we begin to wonder why this controversy should have arisen. We can quite understand how, after it had arisen, both parties should become excited. On one side, the friends of the parochial schools feared and not without reason, that deep injury would be inflicted on these institutions. It is certain that many children were withdrawn from these schools because of the misinterpretations of the proposition of the Apostolic Delegate. One school in the west lost three hundred children in a few weeks. His Excellency's subsequent declaration that he was the friend

of parochial schools, followed so quickly by the Papal document, addressed to the American Bishops has prevented further defection which, otherwise, would certainly have appeared at the opening of the next scholastic year. Can we wonder that people who have made such sacrifices to build and maintain their parish schools, should be thoroughly alarmed and indignant at such a prospect?

On the other hand, some of these good people were represented, in the heat of controversy, as holding the principle that the State should have nothing to say on the great question of the education of her own citizens. She has the undoubted right to provide for their education, and in a country like this, where every man is a voter, and thereby a ruler, to see that they have the necessary qualifications to discharge the duties of their citizenship. We believe that when the smoke of battle shall pass away, cool impartial heads, representing the Church and the State, will deliberate and determine at last on some "modus vivendi." It is the interest of both to perfectly understand each other. The Catholic Church in her organization and spirit, is in harmony with our republican form of government. The State here is not hostile to the Church and only desires to see its wonderful unitive influences exercised in their plenitude, for the restraint of human passion and the general good of the community. If religious education will greatly aid this restraining power, it is of supreme importance that it should be fostered for the benefit of both Church and State.

P. J. R.

LITTERÆ APOSTOL. DE QUESTIONE SCHOLASTICA.

Emo e Rmo Sig. Mio Ossmo.

Qui unita transmetto alla E. V. la lettera pontificia sopra la nota questione scolastica. Non dubito che ne apprendera Ella con piacere il contenuto, e spero che l'importante documento varra a ristabilire la calma nell'animo di quanti si sono interessati alla questione anzidetta. Nell'aggiungere essere desiderio del Santo Padre che V. E. si compiaccia di far imprimere la lettera medesima e di curarne quindi la distribuzione a tutto l'episcopato degli Stati Uniti mi onoro de baciarle umilissimamente le mani e con profonda venerazione mi confermo

Di Vostra Eminenza

umo devmo servitore vero

M. CARD. RAMPOLLA.

Sig. CARD. GIBBONS.

Arcivescovo di Baltimora.

(Con lettera pontificia.)

ROMA, I Giugno, 1893.



DILECTO FILIO NOSTRO JACOBO TIT. S. MARIAE TRANS TIBERIM S. R. E. PRESBYTERO CARDINALI GIBBONS ARCHIEPISCOPO BALTIMORENSI ET VENERABILIBUS FRATRIBUS ARCHIEPISCOPIS ET EPISCOPIS FOEDERATARUM AMERICAE SEPTENTRIONALIS CIVITATUM.

LEO PP. XIII.

Dilecte Fili Noster, Venerabiles Fratres, Salutem et Apostolicam Benedictionem.

Clara saepenumero edidimus argumenta tum sollicitudinis qua tenemur erga fideles sacrorumque Antistites foederatarum Americae septentrionalis civitatum, tum singularis benevolentiae qua partem istam Dominici gregis complectimur. Ad haec illud accessit haud sane obscurum animi Nostri testimonium, quod ad vos miserimus Delegatum Nostrum Venerabilem Fratrem Franciscum Archiepiscopum tit. Naupactensem, virum egregium, doctrina non minus quam virtute praestantem; prout vos ipsi, in proximo Archiepiscoporum conventu Neo-Eboraci habito, palam testati estis, ita confirmantes fiduciam, quae in prudentia ejus a Nobis fuerat collocata. Ipsius autem legatio eo valuit primum ut publicum a Nobis extaret testimonium et propensae voluntatis erga patriam vestram et magnae existimationis erga eos qui istic reipublicae cum potestate praesunt: nomine enim Nostro adfuturus ille erat in dedicatione amplissimae copiae excellentium omne genus rerum in urbe Chicago expositae, cujus et Nos participes extitimus, a praesidibus iisdem comiter invitati. At ejusdem vero legationis hoc praeterea fuit propositum ut perpetua fieret quodammodo Nostra apud vos praesentia, Delegatione Apostolica permanente Washingtonii constituta. Quo facto luculenter declaravimus non modo nationem vestram perinde a Nobis diligi atque alias maxime florentes, ad quas viros cum auctoritate legare consuevimus, sed etiam a Nobis vehementer optari ut vestrum istorumque fidelium mutuae ad Nos conjunctionis vincula, tanguam filiorum ad patrem, arctiora in dies consistant. Nec leve quidem cepimus ex eo solatium quod novum hoc Nostrae erga vos providentiae judicium communis istic secuta sit gratiae in Nos studiique significatio. Jamvero pro paterna in vos sollicitudine Nostra hoc in mandatis praecipue dedimus ipsi Archiepiscopo Naupactensi, ut omnem conferret operam et fraternae caritatis industriam ad omnia evellenda dissidii germina in controversiis nimis cognitis de recta catholicae juventutis institutione; cui dissidio per id tempus addebant faces vulgata quaedam doctrinae capita et sententiae de quibus concitata erat ultro citroque disputatio. Mandatis hisce Nostris omnino paruit idem Ven. Frater, ac novembri mense superioris anni Neo-Eboracum perrexit, quo tecum, dilecte Fili Noster, ceteri convenerant regionis istius Archiepiscopi, desiderio Nostro obsecuti, quod erat a Nobis per Sacram Congregationem de Propaganda Fide significatum, ut, consultis antea suffraganeis suis, consilia conferrent ac deliberarent de optima ratione prospiciendi pueris fidelibus qui pro scholis catholicis Gymnasia celebrent publica. Quae sapienter a vobis in eo conventu decreta sunt placuere eidem Archiepiscopo Naupactensi, qui, collaudata pro merito prudentia vestra, censuit optimas ex iis utilitates esse manaturas. Quod nos judi-

cium perlibenti animo confirmamus, et justas Tibi ceterisque Praesulibus tecum congressis laudes tribuimus, quod opportune consilio et expectationi Nostrae responderitis. Eo autem tempore idem Ven. Frater quum vellet, ut Nobis in optatis erat, quaestiones praecidere de recta juventutis institutione, de qua, jam diximus, incensis animis acrique partium studio, editis etiam scriptis, certabatur, propositiones quasdam vobis exhibuit ab se concinnatas, duplicem attingentes ordinem quo scientia veritatis et actio vitae continetur. Quarum vim et pondus propositionum quum graviter perpendisset Archiepiscoporum coetus, et quasdam in eis declarationes emendationesque petiisset, utrumque Naupactensis Antistes alacer praestitit. Quo facto spectabilis idem coetus finem fecit sessionum, aperiens grati animi sensus profitensque probari sibi eam agendi rationem, qua ille partibus singularis muneris a Nobis crediti erat perfunctus. plorata haec omnia habuimus ex ejusdem actis conventus quae def-ERENDA NOBIS CURAVISTIS. Verum omnivero eae ipsae Delegati Nostri propositiones quum in vulgus importune editae essent, continuo inflammatis animis novae excitae sunt controversiae, quae tum falsis interpretationibus, tum insimulationibus malignis per ephemerides diffusis, latius graviusque exarserunt. Tunc quidam sacrorum Antistites regionis vestrae, sive quod interpretationes aegre ferrent quibus nonnullae ex iis propositionibus explicabantur, sive quod consectaria metuerent quae indeex ipsorum sententia ad animarum perniciem deduci possent, confidenter causam Nobis aperuerunt anxietatis suae. Nos autem memores animarum salutem supremam esse legem quam Nos imprimis spectare opportet, simulque optantes novum vobis offerre pignus sollicitæ caritatis Nostrae, unumquemque voluimus vestrum, datis privatis litteris, suum ea de re judicium liberrime Nobis patefacere: quod singillatim a vobis actum est diligenter. Hisce Nos expensis litteris facile comperimus quosdam exvobis nihil omnino in eis ipsis propositionibus deprehendisse quod timoris causam afferret; quibusdam vero videri per eas propositiones ex parte abrogatam legis disciplinam scholasticae quam Synodi Baltimorenses sanxerunt, adeoque injectum sibi esse metum ne diversa illarum interpretatio tristia foret paritura dissidia, unde scholae catholicae caperent detrimenta. Rem Nobis graviter ponderantibus profecto persuasum est hujusmodi interpretationes alienas prorsus esse a mente Delegati Nostri. ut nimirum a sententia procul absunt hujus Apostolicae Sedis, Sane praecipuae ab eo allatae propositiones e decretis haustae sunt Concilii Baltimorensis III., statuuntque imprimis provehendas esse studiosissime scholas catholicas, judicioque et conscientiae Ordinarii permittendum, qui pro re nata decernat quando fas nefasve sit scholas publicas adire. Jamvero si quovis in sermone sic accipienda sunt ea quae fuerint enunciata posterius, ut iis congruant, non adversentur, quae antea sint dicta, plane dedecet nec aequum est ita secunda explicari ut a prioribus discrepent. Idque eo vel magis valere debet quod scribentis mens nullo modo lateret obscura. Siquidem cum propositiones ille proferret suas in spectabili coetu Neo-Eboracensi, testatus est diserte (QUOD QUIDEM PATET EX ACTIS) admirari sese pastorale studium Episcoporum Americae Septentrionalis propter decreta plena sapientiae, quae in tertia Synodo Bal-

timorensi, ad incrementa causae de catholica juventutis institutione, fuerant promulgata. Adjecit porro, ea decreta, prout generalem tradunt agendi normam, FIDELITER esse servanda: ac licet publica gymnasia penitus improbanda non sint (possunt enim casus incidere, ut Synodus ipsa perspexerat, quibus ea liceat celebrare) omni tamen ratione et ope connitendum esse ut scholae catholicae quam plures sint numero omnique re ornatae ac persectae. Ceterum ne qua subsit in posterum ambigendi ratio vel opinionum dissensio in tanta rei gravitate, quemadmodum jam declaravimus in litteris Nostris, die XXIII. Maii anno superiore datis ad Venerabiles Fratres Archiepiscopum et Episcopos provinciae ecclesiasticae Neo-Eboracensis sic iterum declaramus, quatenus opus sit, constanter servanda esse decreta quae, praemonente Apostolica Sede, in Synodis Baltimorensibus super scholis paroecialibus statuta sunt, et quaecumque alia a romanis Pontificibus sive directe sive per Sacras Congregationes praescripta sunt in eadam causa. Ex quo certa nitimur spe (quam vestra erga Nos et Apostolicam Sedem studia maxime fovent) nihil obfuturum, quominus sublata quavis vel causa erroris vel anxietate, operam daturi sitis, conjunctissimis in caritate perfecta animis, ut in ista quae latissime patet terrarum orbis parte magisque regnum Dei propagetur. Dum autem naviter incumbitis ad curandam Dei gloriam et creditarum vobis animarum salutem, iidem contendite vestris prodesse civibus addictamque patriae voluntatem probare, ut facile intelligant qui rempublicam administrant quam validum suppetat in catholica Ecclesia praesidium ad tuendum civitatis ordinem et populi prosperitatem augen-

Quod vero ad Te nominatim attinet, dilecte Fili Noster, pro certo habemus Te studiose curaturum ut quos tecum communicare animi sensus censuimus, ii ceteris pariter innotescant Venerabilibus Fratribus qui in civitatibus istis sunt foederatis, simulque adnisurum pro viribus ut sedata ac penitus dirempta, prout optatissimum est, controversia, animi quos ea concitaverat in muta benevolentia conquiescant.

Testem interea dilectionis Nostrae Apostolicam Benedictionem Tibi, eisdem Venerabilibus Fratribus, clero et fidelibus vigilantiae vestrae commissis peramanter in Domino impertimus.

Datum Romae apud S. Petrum die XXXI. Maii anno MDCCCXCIII., Pontificatus Nostri decimo sexto.

LEO PP. XIII.

TRANSLATION.

Most Eminent and Reverend Dear Sir:

I herewith transmit to Your Eminence the Pontifical letter upon the noted school question. I do not doubt that Your Eminence will read with pleasure its contents, and I hope that the important document will see calm re-established in the minds of all who have been interested in this question. It is the desire of the Holy Father that Your Eminence would kindly have the letter printed and distributed to all the Bishops of the United States. I would remain, with profound respect, Your Eminence's devoted servant,

M. CARDINAL RAMPOLLA.

TO OUR BELOVED SON, JAMES GIBBONS, CARDINAL PRIEST OF THE HOLY ROMAN CHURCH, TITULAR OF ST. MARY'S BEYOND THE TIBER, ARCHBISHOP OF BALTIMORE, AND TO OUR VENERABLE BRETHREN, THE ARCHBISHOPS AND BISHOPS OF THE UNITED STATES OF NORTH AMERICA.

POPE LEO XIII.

Beloved Son and Venerable Brethren, Health and Apostolic Benediction:

We have often given manifest proofs, both of our solicitude for the welfare of the faithful people and Bishops of the United States of America and of the peculiar affection with which we cherish that portion of our Saviour's flock. Of this we have given an additional and unmistakable evidence in sending to you, as our Delegate, our Venerable Brother Francis, Titular Archbishop of Lepanto, an illustrious man, not less pre-eminent by his learning than by his virtues, as you yourselves, in the recent meeting of the Archbishops in New York, have plainly testified, thus confirming the trust which we had reposed in his prudence.

Now, his legation had this for its first object: That it should be a public testimonial of our good will towards your country, and of the high esteem in which we would hold those who administer the government of the Republic, for he was to assist, in our name, at the dedication of the Universal Exposition held in the city of Chicago, in which we ourselves, by the courteous invitation of its Directors, have taken part.

But his legation had this, also, for its purpose: That our presence should be made, as it were, perpetual among you by the permanent establishment of an Apostolic Delegation at Washington. By this we have manifestly declared not only that we love your nation equally with those most flourishing countries to which we have been accustomed to send representatives vested with our authority, but, also, that we vehemently desire that the bonds of mutual relationship binding you and your faithful people with us, as children with their Father, should grow closer every day. Nor was it a small comfort to our heart that this new act of our care in your regard was followed by a general outpouring of thanks and affection toward us.

Now, in our paternal solicitude for your well-being, we had, above all, given command to the Archbishop of Lepanto that he should use all his endeavors and all the skill of his fraternal charity for the extirpation of all the germs of dissension developed in the too well-known controversies concerning the proper instruction of Catholic youth—a dissension whose flame was fanned by various writings published on both sides. These commands of ours our Venerable Brother fully complied with, and in the month of November of last year he repaired to New York, where there had assembled with you, beloved son, all the other Archbishops of your country, they having complied with the desire which I had communicated to them through the Sacred Congregation of the Propaganda, that, after conferring with their suffragans, they should join counsels and deliberate concerning the best method of caring for those Catholic children who attend the public schools instead of Catholic schools.

The things which you wisely decreed in that meeting were pleasing to the said Archbishop of Lepanto, who bestowed merited praise on your prudence and expressed his belief that these decrees would prove most useful. This judgment we, also, with great pleasure confirm, and to yourself and the other Prelates then assembled with you we give deserved praise for having thus opportunely responded to our counsel and our expectation. But, at that same time, our said Venerable Brother, wishing, as it was our desire, to settle the questions concerning the right instruction of Catholic youth, about which, as above stated, controversy was being waged and writings published with excited minds and angry feelings, laid before you certain propositions, put in shape by himself, touching upon both theoretical principles of the subject and their practical application. When the meeting of the Archbishops had seriously weighed the meaning and bearing of these propositions and had asked for certain declarations and corrections in them—all this the Archbishop of Lepanto cheerfully complied with, which, being done, the distinguished assemblage closed its sessions with a declaration of gratitude and of satisfaction with the way in which he had fulfilled the commission entrusted to him by us. All this we find IN THE MINUTES OF THE MEETING, WHICH YOU HAVE TAKEN CARE TO SEND US.

But these propositions of our delegate having been inopportunely made public, minds were at once excited and controversies started afresh, which, through false interpretations and through malignant imputations scattered abroad in the newspapers, grew more widespread and more serious. Then certain Prelates of your country, whether displeased with the interpretations put upon some of these propositions or fearing the harm to souls which it seemed to them might thence result, confided to us the reason of their anxiety. And we, knowing that the salvation of souls is the supreme law to be ever assiduously borne in mind by us, wishing, moreover, to give you another proof of our solicitous affection, requested that each of you should, in a private letter, fully open his mind to us on the subject, which was diligently complied with by each one of you. From the examination of these letters it became manifest to us that some of you found in the propositions no reason for apprehension, while to others it seemed that the propositions partially abrogated the disciplinary law concerning schools enacted by the Council of Baltimore, and they feared that the diversity of interpretations put upon them would engender sad dissensions, which would prove detrimental to the Catholic schools,

After carefully weighing the matter, we are intimately convinced that such interpretations are totally alien from the meaning of our delegate, as they are assuredly far from the mind of this Apostolic See. For the principal propositions offered by him were drawn from the decrees of the Third Plenary Council of Baltimore, and especially declare that Catholic schools are to be most sedulously promoted, and that it is to be left to the judgment and conscience of the ordinary to decide, according to the circumstances, when it is lawful and when unlawful to attend the public schools. Now, if the words of any speaker are so to be taken that the latter part of his discourse shall be understood to agree, and not to

disagree, with what he had said before, it is surely both unbecoming and unjust so to explain his later utterances as to make them disagree with the preceding ones. And this is the more true since the meaning of the writer was not at all left obscure. For, while presenting his propositions to the distinguished meeting in New York, he expressly declared (AS IS EVIDENT FROM THE MINUTES) his admiration for the zeal manifested by the Bishops of Notth America in the most wise decrees enacted by the Third Plenary Council of Baltimore for the promotion of the Catholic instruction of the young. He added, moreover, that these decrees, in so far as they contain a general rule of action, are FAITHFULLY to be observed, and that, although the public schools are not to be entirely condemned (since cases may occur, as the Council itself had foreseen, in which it is lawful to attend them), still every endeavor should be made to multiply Catholic schools and to bring them to perfect equipment. But in order that, in a matter of so grave importance, there may remain no further room for doubt or for dissension of opinions, as we have already declared in our letter of 23d of May of last year to our venerable brethren, the Archbishop and the Bishops of the Province of New York, so we again, as far as need be, declare that the decrees which the Baltimore Councils, agreeably to the directions of the Holy See, have enacted concerning parochial schools, and whatever else has been prescribed by the Roman Pontiffs, whether directly or through the Sacred Congregations, concerning the same matter are to be steadfastly observed.

Wherefore, we confidently hope (and your devotedness to us and to the Apostolic See increases our confidence) that, having put away every cause of error and of all anxiety, you will work together, with hearts united in perfect charity, for the wider and wider spread of the Kingdom of God in your immense country. But while industriously laboring for the glory of God and the salvation of the souls entrusted to your care, strive also to promote the welfare of your fellow-citizens and to prove the earnestness of your love for your country so that they who are entrusted with the administration of the government may clearly recognize how strong an influence for the support of public order and for the advancement of public prosperity is to be found in the Catholic Church.

And as for yourself, beloved son, we know for certain that you will not only communicate to our other venerable brethren in the United States this our mind which it hath seemed good to us to make known to you, but that you will also strive with all your power that the controversy being not only calmed, but totally ended, as is so greatly to be desired, the minds which have been excited by it may peacefully be united in mutual good will.

Meanwhile, as a pledge of our affection, we most lovingly in the Lord bestow upon you, and upon our said venerable brethren, and upon the clergy and faithful people entrusted to your care, the Apostolic Benediction.

Given at Rome, from St. Peter's, on the 31st day of May, in the year 1893, the sixteenth year of our Pontificate.

LEO XIII., POPE.

Scientific Chronicle.

THE LIFE-SAVING SERVICE OF THE UNITED STATES.

Annual Report of the Operations of the United States Life-Saving Service for the Fiscal Year Ending June 30, 1890. Government Printing Office, Washington, 1892.

Revised Regulations for the Government of the Life-Saving Service of the United States. Ibid., 1884.

Organization and Methods of the United States Life-Saving Service. Ibid., 1890.

Instructions to Mariners in Case of Shipwreck, etc. Ibid., 1888. The first three by S. I. Kimball, General Superintendent; the last by Lieutenant C. H. McLellan, U. S. R. M., Assistant Inspector of the Service.

THE first authentic account we have of a voyage by sea is charmingly simple. A ship is built from the plans of the Master Workman, and finished from stem to stern, inside and out, to the most minute details. When all is ready, an astonishing cargo of live-stock, with provisions for a twelve months' cruise, is got safely aboard and carefully stowed away. A father and his three sons constitute the whole crew; their wives are the only passengers.

Instead of launching their ship into the waters, as we do now, they wait in patience till the water comes to them and floats them away. Whither bound they know not; they only know that they are floating above the ruins of a drowning world, and that their great Captain above will bring them safe to land when the fearful wrack has passed away.

And so it was, and it was well it was so, for that good ship was freighted with the destinies of the human race. She never made a second voyage; she accomplished her whole mission in one, and was abandoned on the mountain side where she first made land. Those who were in her were saved, and no one was saved in any other ship. There was but one ark. The evidently mystical meaning of these things we leave to other, abler pens, while we confine ourselves to themes less exalted.

Having been taught the way, men soon began to build ships on their own account, and then disasters began to occur, not only on the open sea, but even more frequently on the shores themselves. In a word, when "men began to go down to the sea in ships" they sometimes went under the sea, ships and all, and stayed there. Now, next to the saving of a human soul, there can be no deed more noble than the saving of a human life; and when this is done in the face of difficulties, hardships, and dangers, it rises into heroism. Nothing of this world is more sacred

than a human life, and hence it would seem that men ought to use every possible means for the prevention of shipwrecks, and, when prevention has failed to prevent, for the succor of those who are exposed to danger. Some of the more important means of prevention have been sufficiently detailed in previous articles on "Light-Houses," etc. The means of succor come under the head of "Life-Saving Service."

As far back at least as the times of the Roman emperors there were laws relating to wrecks, but the term was used in a very restricted sense, only meaning ships or goods cast on land by the sea. When goods thrown overboard sink and remain under water they are called *jetsam*; when they float they are called *flotsam*; when they sink, but have been marked by a buoy or float, they are called *ligan*. These three classes constitute what were called derelict or abandoned goods. Still, it requires quite an effort to comprehend how the term "derelict" could be applied to the *ligan* when it was the evident intention of the owner not to abandon his goods. According to the natural law, truly derelict goods may be taken possession of by him who finds them, but positive law has, in most countries, restricted this right more or less.

In the Roman law, at least in later times, wrecked goods were restored to the original owner in case he claimed them before a judicial tribunal within a year and a day; if he failed to do so they became the property of the state. Theft from wrecks was regarded as aggravated on account of the helpless condition of the owner, and was punished by a four-fold fine if action was brought against the thief within a year and a day; otherwise, the thief was liable for the loss simply. Plunderers of wrecks and those who showed false lights in order to lure ships on to destruction were, besides, punished by criminal procedure.

These laws regarding the plunderers of wrecks—"wreckers" they were called—have existed, with certain modifications, among all civilized nations down to our own days. The word "wrecker" affords a curious example of a change from a bad signification to a good one, since it formerly meant a destroyer and plunderer, while it is now used to signify a person lawfully employed, under contract, to save shipwrecked goods for their owner.

In France, England, the Netherlands, and elsewhere the laws were twisted and turned and modified and amended in various ways in order to head off these plundering wreckers; but the wreckers managed pretty well to hold their own, and indeed much more than their own, in spite of kings, sheriffs, laws, and regulations. In the time of Henry III., of England (1216), a law was enacted to the effect that if a man, a dog, or a cat escaped alive from a ship, such a ship was not to be adjudged a wreck, but ship and goods must be taken care of by a king's officer, and if any one sued for them within a year and a day, and proved his claim, they were to be restored to him. If, however, no living thing escaped, the goods, ship, and all belonged to whoever first took possession of them.

The law meant well enough, for it was intended as a protection to the rights of the surviving owner, and the dog and cat were probably put in as a sort of connecting link between the goods and any possible heirs on shore; in other words, as a means of proof that the wreck did belong to such and such parties. It seemed to work well enough at first, but later on some wise judge, in the fullness of his wig and the emptiness of his head, took the escape of a living being as the sole and only proof of ownership, and his successors followed for hundreds of years the lead of their insane predecessor. The result was disastrous. The luring of ships on to destruction by false lights became an almost regular business, and no one, man, dog, or cat, was allowed to escape alive to make any claim. In 1771 Lord Chief Justice Mansfield rose in his might and declared that "the ruling of the law, as applied for several centuries, was contrary to all principles of law, justice, and humanity," and he returned to the original, common-sense interpretation.

Although in the oldest laws relating to the matter mention was made of affording succor to shipwrecked persons, yet, practically, the saving of property was considered the more important, and no organized effort was made for the saving of life till near the end of the eighteenth century. In England the first life-boat was invented about 1784, and only in 1791 were the first serious steps taken for the rescue of the shipwrecked, and even then it seems to have been the work of private individuals.

In our own country, in 1786, the Massachusetts Humane Society was instituted for the relief of distressed persons in general, but, three years later, the society happily resolved to devote its entire energies to the relief of persons shipwrecked on the adjoining coasts. This "child of a hundred years" is hale and hearty, and is doing good work yet. May its shadow never grow less.

It was almost sixty years after this date before the Government even thought of lending its aid, and its first thought was not a big one. Congress, in 1848, made an appropriation of \$10,000, to be expended for the rescue of human lives, in case of shipwreck, on the coast of New Jersey. This may be called the birth of our life-saving service. In less than fifty years it has grown to healthy, vigorous manhood, and now ranks among the best-organized institutions of the country. But its early progress was slow. For more than twenty years no regular crews were employed, and even though small sums were from time to time appropriated for boat-houses, boats, etc., yet, without the aid of trained and skilled hands, all mere material appliances could show but meagre results.

At last the nation awoke, and, on April 20, 1871, Congress made an appropriation of \$200,000, to be expended for life-saving purposes through the medium of the Revenue Cutter Service. The chief of this service, Mr. Sumner I. Kimball, a young man of superior ability, who had just been appointed to his office, entered heart and soul into the life-saving phase of his duties. In the course of the next seven years he showed such splendid results that the life-saving service was separated from the revenue service and erected into a distinct bureau under the Secretary of the Treasury. President Hayes, in 1878, appointed Mr. Kimball general superintendent of the new life-saving service, which office he ably fills to the present time. Every detail of every accident

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that has happened to life or property within the precincts of the lifesaving service during twenty-two long years, has passed in review before his searching eye. How many a wail has come up from the great deep and along its shores to find a sympathetic echo in his breast? How many a deed of heroic daring on the part of his own brave men has quickened that pulse and sent a thrill through that noble heart?

The publications whose titles we have placed at the head of this article give us a fairly full account of our life-saving service as it exists to-day. We shall draw upon them pretty freely for the facts and figures which follow, and which we think will be of interest to the readers of the QUARTERLY.

The sea and lake coasts of the United States have an extent of over 10,000 miles. For the purposes of the life-saving service this distance has been divided into twelve sections, called districts, in each of which has been established a certain number of stations. Thus:

		Stations.
First District (coasts of Maine and New Hampshire), .		. 11
Second District (coast of Massachusetts),		. 21
Third District (coasts of Rhode Island and Long Island),		. 38
Fourth District (coast of New Jersey),		. 41
Fifth District (coast from Cape Henlopen, Del., to Cape C		,
Va.),		. 16
Sixth District (coast from Cape Henry, Va., to Cape Fear, I		
Seventh District (coasts of South Carolina, Georgia, and	easter	rn
Florida),		. 12
Eighth District (coast of the Gulf of Mexico),		. 8
Ninth District (coasts of Lakes Erie and Ontario).		. 10
Tenth District (coasts of Lakes Huron and Superior),		. 13
Eleventh District (coast of Lake Michigan),		. 24
Twelfth District (Pacific coast),		10
	•	
Total,		. 233

From the foregoing table it appears that there is a striking disproportion in the number of stations for a given distance, at different places along the shores. This fact will come out more clearly, however, if, disregarding slightly the division into districts, we arrange the table, for the purposes of comparison, as follows:

				Miles.	Stations.
(1)	From Quoddy Head, on the coast of Maine, to	Rac	e		
	Point (the most northerly point of Cape	Cod),		
	we have a coast line of about			420	18
(2)	Seaward coast of Cape Cod,			40	10
(3)	Cape Cod to Montauk, L. I.,			011	10
(4)	Seaward coast of Long Island,			120	32
(5)	Coast of New Jersey,			130	41
(6)	From Cape Henlopen, Del., to Cape Charles,	۷a.,		116	16
(7)	From Cape Henry, Va., to Cape Hatteras, N.	C.,		121	23
(8)	From Cape Hatteras to Cape Fear, N. C.,			175	6
(9)	From Cape Fear to Florida Keys,			700	12
(10)	From Florida Keys to the Rio Grande, .			1852	8
	On the Pacific coast,			1810	10
(12)	On the Great Lakes,			3000	47

Of the twelve stations under No. 9, only two are real stations, the other ten being merely houses of refuge, of which more anon. Of the forty-seven credited to the Great Lakes, one is an isolated station at the Falls of the Ohio River, Louisville, Ky.

Pardon us, gentle reader, if we seem to have too great an inclination for tables; one more is necessary in order to render this matter perfectly luminous. It gives the average distance between stations in the different divisions we have just named, beginning with the coast where they are most thickly set and ending where they are most sparse. Thus we have, from station to station, as average distances:

		Miles.
On the coast of New Jersey,		31/6
On the coast of Long Island,		3¾
On the coast of Cape Cod,		4
Between Cape Henry and Cape Hatteras,		514
Between Cape Henlopen and Cape Charles,		714
Between Cape Cod and Montauk Point,		11
Between Quoddy Head, Me., and Race Point, Mass.,		23
Between Cape Hatteras and Cape Fear,		29
On the Pacific Coast,		181
On the Gulf Coast,		231 1/4
On the Lake Coast,		250
Between Cape Fear and Florida Keys,		450

The reason of this enormously greater concentration along certain stretches of coast than along others is founded on the principle of doing good first where it is most needed, keeping in view at the same time the claims of the greatest number. We shall take up then, for discussion, the different coasts, in the order last given.

The ocean shores of New Jersey and Long Island form with each other nearly a right angle, the one looking in an easterly, the other in a southerly direction. At the vertex of the angle is the harbor of New York. At the south end of the New Jersey arm, is the entrance to Delaware Bay. Along these shores there passes the enormous ocean commerce of New York, Brooklyn and Jersey City, and a great part of that of Philadelphia and Wilmington, as well as an immense amount of coasting trade.

This coast line of 250 miles is quite similar in character throughout nearly its whole extent. It is a strip of sand-beach varying from a quarter of a mile to five miles in width, and is separated from the main land, at some places by rather narrow stretches of water, at others by veritable bays. Thus we have Shinnecock, Moriches and Great South Bays, on the Long Island, and Barnegat and Great Bays on the New Jersey coast. This sand-beach is unbroken, except by the entrance to New York harbor, and by a few shallow inlets between the ocean and the waters within. There are consequently few available harbors.

But this is not the worst of it. If these sandy shores were all, and especially if they were of such a slope that ships driven upon them could come well up, few of these would be actually wrecked. Each

blow of a wave would tend to force the ship up beyond the impact of the succeeding wave, and little damage would be done. Besides, escape from a vessel, stranded under such circumstances, would not be a difficult task. But, the same causes, winds, currents and tides, which ages ago, built up this strip of sand, are now at work building, maintaining or shifting another strip, at a distance of from one to four hundred yards further seaward. It consists of a succession of sand-bars, more or less submerged, according to the condition of the tide, on which, in heavy gales, huge walls of surf continually form and break.

When a vessel is driven upon one of these sand-bars, in a violent storm, she will be alternately lifted and flung down by the rising and falling waves, until by the repeated blows she springs a leak or even has her back broken; or perhaps, she may stick fast, and then the huge waves will break over her in fury, and sweep away deck houses, sails, rigging, masts and everything that told of the once stately monarch of the seas. She lorded over them once; they will have their revenge now. We can bear with all this, for, great as they are, such losses can be repaired.

But there are, it might be truer to say there were, human lives there, and to escape in an ordinary ship's boat, through that wall of surf is always difficult, often impossible. And far away, a father, or a mother, a son, or a daughter, a brother or a sister, a husband or a wife, may be watching and waiting for a loved one's return. And many a time and oft there will be no return, until the deep gives up its dead. We too have known this pang, and forty-six years of a checkered life have not effaced its memory. "These sands are literally strewn with the half-buried and decaying skeletons of wrecked vessels, while the grave-yards of the coast villages and settlements abound with unmarked mounds that tell a sorrowful tale of the destruction of human life."

Similar conditions obtain on the eastern shore of Cape Cod, along which a great portion of the commerce of Boston must find its way; and what makes this coast still more dangerous is the prevalence of those dreadful northeastern gales which often drive shipping from the north and east, in darkness and fog, past its intended harbor, till it comes to find destruction on this merciless shore. "The shifting sandbars of Cape Cod have hence become the burial-ground of unnumbered craft." All things considered, the coasts of New Jersey, Long Island and Cape Cod may be set down as the very worst within our boundaries. Here, therefore, the life saving service has multiplied its stations, and placed them near together, in fact almost within hailing distance, so that they may be able to co-operate in case of need.

The next in importance, according to our list, is the stretch of 121 miles from Cape Henry, Va., to Cape Hatteras, N. C., and following closely is the section just north of it, a run of 116 miles between Cape Henlopen, Del., and Cape Charles, Va. A good part of the ocean commerce of Philadelphia, and all that of Baltimore, Norfolk and Washington, as well as a large coasting trade, skirt along these shores. The same general formation, as above, of sand-ridge and outlying shoals, is

characteristic of all this coast. The bulk of the trade, however, being considerably less, and the climate in general milder than on the coasts further north, there are fewer wrecks, and the stations have been planted somewhat further apart, *i.e.*, from five to seven miles. Notwithstanding these distances, the forces of two or even three stations have, in some cases, been massed together, thus enabling them to do what neither alone could have hoped to accomplish.

Going northward again, we find that between Montauk Point, Long Island, and the southern extremity of Cape Cod (110 miles), the stations are about 11 miles apart. This coast line includes Nantucket, Martha's Vineyard, Block Island and the shores of Rhode Island. These coasts, unlike anything further south, are bold and rocky and apparently very dangerous; but they are well lighted and enjoy the advantage of many excellent harbors in which storm-tossed vessels may find refuge. Hence only points of greatest peril are covered by the Life Saving Service.

On the coast of Maine, New Hampshire, and part of Massachusetts (down as far as Race Point), the average distance between stations is 23 miles. And yet nearly the whole of these shores are covered with rocks, and abound in rugged headlands, islets, reefs, and every other coast danger known to the sailor. On the other hand, there are many excellent harbors, and, besides, a great part of the coast of Massachusetts is under the voluntary guardianship of the good old Massachusetts Humane Society, whose efficient work the Life Saving Service gladly and gratefully recognizes.

Retracing our steps once more to the "sweet, sunny South," we have, on the coast of North Carolina, between Cape Hatteras and Cape Fear, a distance of 175 miles, with stations about 29 miles apart. These are placed at the most exposed points, and are intended to guard the commerce of North Carolina, as well as the coasting trade in these regions.

The Pacific coast is not considered dangerous. From our southern boundary line, near San Diego, to San Francisco, a distance of about 600 miles, an almost perpetual summer reigns, and shipwrecks are so infrequent that stations are not needed. The rest of the coast, from San Francisco to the Strait of Juan de Fuca, acr. ss which we shake hands with our still separated brothers of Canada, is a coast of nearly 1200 miles in extent. It is bold and almost unbroken and almost without harbors. This would seem to point it out as a place to be shunned by the sailor. It has, however, compensating advantages, for it is a remarkably regular coast, and what is of more consequence, the winds are almost always from the north, and therefore parallel with the shore. The few points of danger are the entrances to the principal ports, and these are guarded by ten stations.

Our peregrinations will now take us back to the Gulf of Mexico. The character of this immense coast-line of more than 1800 miles is pretty much the same throughout. The water is shoal for a long distance from the shore, the shores themselves are generally low, and sandy or marshy. The dangerous winds are generally from the north or north-

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east, and these tend to force vessels off, not on, shore, except where a portion of the Texan coast runs nearly north and south. On all the north shore of the gulf there is but one station; it is on Santa Rosa Island, at the entrance to Pensacola Bay, Florida, the remaining seven of this district being situated at the mouths of the bays and harbors of Texas.

The five great lakes, Ontario, Erie, Michigan, Huron and Superior cover an area of about 80,000 square miles, equal therefore to the combined area of New Hampshire, Vermont, Rhode Island, Connecticut and New York. That portion of their coast lines falling within the boundaries of the United States is well on to 3000 miles. These lakes are open to navigation from about the beginning of April till the early part of December, being closed by ice for the rest of the year. There are not many natural harbors, but a great number of artificial ones have been formed, at the mouths of the rivers, by building protecting piers of masonry for a considerable distance out into the lakes.

The lakes are generally quiet and well behaved, and the astonishing commerce of these inland seas moves gaily back and forth. But at certain seasons, especially at the opening and closing of navigation, in the early spring and late fall, severe gales are experienced. These lash the waters into sudden fury, and vessels nearing a port, with little sea-room, are liable to miss the narrow entrance to the harbor and be stranded on the rocks outside, or be hurled against the piers themselves. In either case they are doomed to almost certain destruction. At some of these spots many disasters have occurred in a single day. For these reasons it is principally near the mouths of harbors that Life Saving Stations are required. At the present time there are 47 of them in active operation in the lake districts.

Lastly, we come to the coast, the safest of all, between Cape Fear, N. C., and the Florida Keys. It is a stretch of over 700 miles, where almost perpetual summer holds sway, and where shipwrecks are rare. Even if a vessel is unintentionally stranded, since there are few outlying sandbars, she will generally get well up on the shore, and those on board will easily make good their escape to land. Only two points, the entrance to Charleston Harbor, N. C., and Jupiter Inlet, Fla., have been deemed worthy of fully equipped stations.

The eastern coast of Florida being but thinly settled, castaways run far less risk of drowning than of starvation. Ten Houses of Refuge have therefore been established along the shore, at an average distance of about 26 miles apart. These houses are capable of accommodating twenty-five persons, and are provisioned with supplies sufficient for them for ten days. Guide posts, at every mile indicate the distance and direction to the nearest House of Refuge. One would think it would be almost fun to be wrecked on such a coast.

We have, so far, given in outline, an account of the character of our coasts, of their division into districts, of the number of stations in each district, and, in a general way, of their distribution along the shores. It will be remembered that there are 233 of these stations some twenty

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more have been authorized to be built, and the Superintendent is of opinion that, when these are completed, we shall have a sufficient number for the practical needs of our actual commerce.

Naturally the next point to be considered is the stations themselves and their equipment. The station buildings vary somewhat according to their location and date of erection.

1. Most of those on the New Jersey and Long Island shores have been enlarged from the boat-houses used by the old volunteers, before the employment of regular crews. Those built later are of a better and more convenient type. They are two-story structures, the lower floor being divided into four rooms; a boat-room, a mess-room (also used as a sitting-room), a keeper's-room, and a store-room. Wide, double doors, and a sloping platform extending from the sills to the ground, permit the easy egress and ingress of the larger pieces of life-saving apparatus. The second story is divided into two rooms; one is the sleeping-room of the men, while the other is provided with spare cots for rescued people, and is also used for storage. The larger stations have a separate room for a kitchen; in other cases, the mess-room must do duty for culinary needs. Every station is surmounted by a lookout or observatory, in which a day watch is kept. The roofs facing seaward, being painted a dark-red, are visible a long distance off shore. The stations are also marked by a flag-staff, 60 feet high which is used in signaling passing vessels by the International Code.

The equipment of the stations generally consists of two surf-boats. with their oars, compasses and other outfits, a boat carriage; two sets of breeches-buoy apparatus, a line-throwing gun with accessories, a guncart, a life-car, twenty cork jackets, two heaving-sticks with lines, a dozen Coston signals, a dozen signal rockets, a set of signal flags, a miniature set of signal flags for drill practice, a well-stocked medicine chest, a barometer, thermometers, spy-glasses, a speaking-trumpet, patrol lanterns, patrol checks or clocks, a supply of house-keeping furniture, dry clothing for rescued persons, fuel and oil, tools for the repair of boats and apparatus, official books of registry and blank forms, and a pretty fair library. At some stations where, in case of need, horses cannot easily be hired, a pair is kept and cared for by the crew. The foregoing list embraces only the more important items, but the talent for detail displayed by our Government is something amazing. The complete list of things supplied to a station, and for which the keeper is responsible, embraces entries under the heading of every letter of the alphabet except X and Y, and mounts up to 437 distinct kinds of articles; to be accounted for by the piece, or by the dozen, or the thousand, or by the pound, ton, gallon or yard.

2. The stations at the harbors in the Lake Districts differ from the preceding in that they are provided also with a heavy life-boat for severe outside work, and a small boat for quick work in the immediate vicinity of the station. The buildings are located as near the water's edge as possible, and an inclined platform, upon which are laid two tramways for the launching of the boats, extends from the boat-room

down into the water. The boats are kept mounted on cars, by means of which they can be put afloat with the men at their oars in half a minute. The surf-boat, mounted on its wagon, may be taken out by a rear door in case it should be necessary to transport it along the shore before launching.

3. The floating station at Louisville is unique. It consists of a scow-shaped hull, on which is a house of two stories surmounted by a look-out. Two boats and two reels of 5-inch manilla rope constitute about the whole of the life-saving apparatus. The ropes can be run off the reels in the boat house, or reels and all can be rolled on board the boats and transported elsewhere. The station is usually moored above the dam at a point where it will afford the readiest access to boats meeting with accident. It can, however, be towed from place to place, as in the great floods of 1883-'84, when it rescued and conveyed to places of safety 800 imperilled persons, men, women and children, and supplied food and other necessaries to more than 10,000 more.

Among the articles enumerated above as belonging to a life-saving station, a few require some words of explanation. The surf-boat is but a development of the boat found in use among the fishermen of the New Jersey and Long Island shores, for crossing the sand-bars in their daily blue-fishing. The Beebe boat, named after the man who devised certain improvements in its construction, is built of white cedar with white-oak frames. It measures from 25 to 27 feet in length, with a beam of 61/2 to 7 feet, and a depth of 2 feet 3 inches to 2 feet 6 inches amidships. Its bottom is flat with little or no keel, and, without crew, it draws 6 or 7 inches of water. Its weight is from 700 to 1100 pounds. It is propelled by six to eight oars, 12 to 18 feet in length, and will carry, exclusive of its crew, from twelve to fifteen persons in a bad sea. No sails are used. It costs from \$210 to \$275. The Beebe-McLellan boat is similar to the preceding except that it is at the same time selfbailing. It has not as yet been thoroughly tested by experience, but the indications are that it will be successful, and that it will be even able to carry sails. With the self-righting quality added, it becomes a true lifeboat, but the objection to the making of this addition, is that it is liable to render the boat too heavy for transportation along the sandy shores, and rather unwieldly in the water.

A good deal has been said and written in years past about the possibility of getting for use in the service some motive power other than human muscles. Steam has been proposed, and so has electricity, but in either case the weight of boiler and engine, or of accumulators would render the boat entirely too heavy for transportation along the shores, and make it draw too much water to float over the bars. Moreover, in case of a capsize, the fires would be extinguished, the boiler would probably collapse, and everything would be ruined; neither would accumulators stand such rough usage. The screw besides would work at immense disadvantage in a surf. Compressed air, or liquid carbonic acid worked on the reaction principle, might perhaps be made to answer, but we believe that nothing practical has yet come forward, in this line. For

launching, the surf-boat is brought down to the water on its carriage. The carriage is backed in as far as possible, the crew take their seats, and when the right moment arrives, at the word of command, the carriage is jerked out and the boat is shot, bow on, into the water. Human muscle and human will and human courage and human skill will now be tested to their utmost; and the records are there to show that no valor on the field of battle has ever surpassed that of the brave life-savers of our coasts. During these twenty-two years not one of them has ever shown the white feather.

But there are storms on our coast in which neither surf-boat nor lifeboat could live for five minutes. He who is in command of the station holds in his hand the lives of his crew, and he must not lose them in a vain attempt to achieve the impossible. They are trained to deeds of courage and of daring, but not of foolhardiness. When therefore boats would be clearly useless, other means must be tried. of these and the one on which all the others depend for their use, is the life-line. The gun used for throwing the line was invented by Captain D. A Lyle, of the Ordnance Department of the United States Army, and is hence called the Lyle gun. It is of bronze with a smooth 21/2inch bore, weighs, with its carriage 185 pounds, and carries a 17-pound shot. This shot is a solid cylinder 141/2 inches in length, into the base of which is screwed an eye-bolt for receiving the shot-line, the bolt projecting sufficiently beyond the muzzle of the gun to protect the line from being burned off in firing. When the gun is fired the weight of the line causes the shot to reverse. The shot lines used are of three sizes, being $\frac{4}{32}$, $\frac{7}{32}$, and $\frac{9}{32}$ of an inch in diameter. They are called No. 4, No. 7, and No. 9, the largest being thus about as thick as a lead The maximum charge of powder is 6 ounces, with which charge and a No. 4 line, under favorable circumstances, a range of 605 yards has been attained. With a larger line the range is of course shorter. The No. 4 is used only where the vessel is beyond the range of the heavier lines, because it is not strong enough to haul what is called the whip line on board, and an intermediate one must be supplied, and this is a waste of time and labor, when time and labor are both precious. There is another gun and even a rocket with a slightly greater range, but for reliability, ease in handling and moderate cost, the Lyle gun is preferred by the service. Usually the shot goes over the vessel; sometimes however, it falls short, and then a second is sent, but what seems strange is that there is no known instance in which the shot ever struck or injured anybody on board.

The shot-line having been found by those on board, is to be hauled in till it brings a whip-line on board. A whip-line is an endless rope rove through a block, and when this block comes aboard it is to be fast-ened to the mast by its tail-piece; the shot-line is then cast off. Another block through which the same endless rope passes is already fixed on the shore, and this establishes a communication between ship and shore by an endless rope passing through two pulley-blocks, one at each end. By means of this rope (which as we have said is called a whip-

line), a hawser, one inch thick, is hauled out to the ship where it is to be made fast a short distance above the whip-line. On this hawser is a traveling pulley, a veritable trolley, which is hauled back and forth by the whip-line. From this trolley is hung the breeches-buoy.

The breeches-buoy is indeed a pair of breeches, very short in the legs, but very roomy, and very strong. Into the buoy steps one of the passengers, and he is immediately hauled in by the crew on shore. And in like manner the others follow. The breeches will even carry two at a time, each one making use of but one of the legs of the apparatus. When however, the ship is plunging much so that the hawser cannot be held taut, then, with the alternate slacking and tightening, the buoy is dropped into the water and next shot up as from a catapult; no mortal could stand such treatment long, and so other means must be taken. Again, when the masts are gone and the hawser must be made fast to the guiwale, and when at the same time the shore is low, the buoy would drag in the water all the way, and the passenger would probably be drowned anyhow. Here the buoy fails again. It will likewise fail, and for the same reason, if the distance between ship and shore be too great. It will also fail if the number of persons to be rescued be large, and there is need of great haste, as when the vessel is rapidly breaking up. In these, and in some other circumstances, the life-car is called into play.

The life-car is a covered boat made of galvanized iron and furnished with a ring at each end in which the hauling-lines may be made fast. By this means it is hauled back and forth on the water without even using the hawser. The cover of the boat is convex, and is provided with a hatch which fastens either inside or outside, through which entrance and exit are effected. It is capable of holding six or seven persons, and with strong and willing hands on shore it can be made to voyage back and forth at a good speed. On the occasion of its first use it saved two hundred and one persons who were otherwise doomed. Where the shore is abrupt, and there would consequently be difficulty in landing from the water, the life-car is swung to the hawser, just as the breeches-buoy, and travels clear of the water through the whole distance.

The heaving-stick is simply a short stick loaded at one end so that it may be steady in its flight, and carrying a fine line, just as the gun-projectile does. It is thrown from the hand, and is, of course, useful only at short range, but still will reach much further than an ordinary coil of heaving-line.

The Coston signal is a bright-red light which burns for a short time, and is used by the beach patrol to warn vessels off dangerous points, or in case they are already aground, to assure them that assistance will come. The remaining articles in list given above hardly require a description.

Many of the stations are connected by telephone with one another, and with the neighboring villages, and these connections are being gradually extended throughout the whole service.

Up to this time we have treated mainly of the merely material part of

our subject. It is time now to say something about the organization and the results achieved.

The Life-Saving Service is attached to the Treasury Department of the government because that department has charge of all matters concerning commerce and the collection of the revenue, and to both of these the Life-Saving Service is closely related. The Secretary of the Treasury is therefore its official head; but all appropriations must of course come through Congress.

The acting head, however, is the General Superintendent, who is appointed by the President and confirmed by the Senate. His term of office is not limited by any law, and is therefore subject only to the good will of the President. His qualifications must be such as are demanded by his office; these, among others, are a thorough knowledge of all the means used in the service for the saving of life and property from shipwreck, coupled with large experience and sound administrative ability. No mere political figure-head would suffice there, and perhaps this is the reason why his salary is so low, being only \$4000 a year. Why, the Sergeant-at-Arms in the Senate receives more than that. An Assistant General Superintendent, appointed by the Secretary of the Treasury, aids his chief in the discharge of his duties, and, in his absence, takes his place. His salary is \$2500. The office of the General Superintendent is in Washington, where, to assist in the transaction of business, a corps of clerks, a civil engineer, a topographer, a hydrographer and a draughtsman are employed. There is, besides, a "Board on Life-Saving Appliances," whose duty it is to examine and report on all inventions and devices that are intended to meet some want in the service.

The next in rank to the General Superintendent is the Inspector, an officer detailed from the Revenue-Cutter Service. His headquarters are in New York City. His business is to inspect about everything connected with the service—stations, men, materials, work, apparatus and their construction, contracts, the drill and efficiency of the crews, etc. He has an assistant to aid him in his work and to take his place in case of his absence.

For each district there is an Assistant Inspector, subordinate to the General Inspector, and who performs in his own district the duties enumerated above, and such others as may be required of him by his superior officers. In case of shipwreck, attended with loss of life, the law requires a strict examination, and it is customary to detail a district inspector for this purpose. He must carefully investigate all the circumstances connected with the disaster, with a view of ascertaining whether the officers or employees of the service can be accused of neglect, errors of judgment, or misconduct in the matter. The details of such investigations are published in the annual reports of the service. The Inspector and Assistant Inspectors receive their regular pay as members of the Revenue Service, but nothing more.

Each district is under the immediate charge of a district superintendent. At the time of his appointment he must not be under 25 nor over 55 years of age. He must know English fairly and be able to keep ac-

counts; be familiar with all the coast of his district and understand the management of all life-saving appliances used therein. He is the disbursing officer for all supplies, and paymaster of all the employees under his charge. He conducts all the business of his district in all matters relating to money and materials, and is, moreover, an inspector ex officio of customs. He is under bonds to the amount of from \$10,000 to \$50,000, and receives a salary of from \$1000 to \$1800 per annum.

Each station is in the care of a keeper, who has immediate control of all its affairs. His post is one of the most important in the service, for it is under his leadership that the real work, the saving of lives, is to be accomplished. He must be able-bodied, physically sound, a master of boat-craft and surfing, and have sufficient education to transact the station business. He is nominated by the district superintendent, but the nomination must be confirmed by the district inspector and approved by the General Superintendent. As political influence must, according to law, be severely kept out of the service, it is very rare to find any disagreement in regard to the choice of keeper or other employees.

Keepers reside constantly at their stations, and everything belonging to their stations is in their care, and they are always held responsible for all station property. They are the captains of their crews, and direct them in all their endeavors and share equally with them in all dangers and perils. On their courage, coolness, and judgment depend the lives both of shipwrecked persons and of their own crews. By law they are the guardians of all wrecked property until it is turned over to its rightful owners or to their own superior officers. They are required to keep a daily journal, or log, in which everything which takes place at their stations is recorded, transcripts of which are sent every week to the general superintendent. Immediately after the occurrence of a wreck, the keepers send a detailed account of the disaster, and to jog their memories a list of sixty-six printed questions must be answered one by one. They drill their crews every week, for a specified time, in the use of all the appliances under their control, and are responsible to the district inspectors for the efficiency of the drill and the general good conduct of their men. The maximum salary (paid only to a few keepers for some exceptional reason) is \$800; the ordinary salary is \$700, but keepers of houses of refuge receive only \$400 a year.

The crews employed at the stations are called "surfmen." Their number, at a given station, depends on the number of oars required to pull the largest boat belonging to it. Every station has at least one sixoared boat, and the self-righting life-boats require eight oars, so that the number of men is from six to eight. The selection of surfmen is left to the keepers under certain wise restrictions. This plan has been found the best, because experience has taught that it begets mutual confidence between the leader and his followers, without which strict discipline in hazardous enterprises could hardly be maintained. The restrictions are that the men must be chosen on account of their fitness for the work, and not through any political or family influence. Hence, a keeper is forbidden to take into his crew his father, brother, or son unless it would

be clearly for the greater good of the service to do so. And of this the general superintendent is judge in last resort. Adherence to these rules, or rather laws, has filled the stations with the very pick of the hardy race of beachmen who dwell along our shores. Surfmen receive \$50 a month during the "active season," and \$3 for each occasion of serving at other times. The crews of stations are not entitled to salvage for saving or assisting to save property from wrecked vessels. They may receive rewards offered volunturily, but are strictly forbidden to solicit such rewards.

Compensation equal to one's regular salary is granted for one year (in some cases for two years) to a keeper or surfman who has been disabled by any injury received, or disease contracted, in the line of his duty; and in case of death from the same causes this compensation goes to his widow and children under sixteen years of age.

We have incidentally mentioned above the "active season." This means the portion of the year during which the crews reside at their stations. It differs for different localities, according to their different conditions, climatic and otherwise. Thus, the "active season" for the Atlantic and Gulf coasts is from September 1st to May 1st, it being considered unnecessary to man the stations during the remaining four months, which are the mildest and fairest of the year. In our humble opinion this judgment is not entirely correct, at least for certain portions of this coast, for in this very year a number of disastrous wrecks have been reported since May 1st.

On the Pacific coast six stations are closed from May 1st to September 1st; the remaining four are in active operation the year round, as is also the station at Louisville.

On the Lake coasts the "active season" extends from the opening of navigation, about April 1st, to the ice season, about December 1st. Of course there would be no use in keeping the station open during the "frozen season" on the Lakes, but we believe that the closing of the stations during one-third of the year at other places, and the meagre pay of surfmen, keepers, and officers generally, constitute the weak points of an otherwise sound system. Even if it be the finest season of the year, it is not easy for men to find employment for just four months, for, be it understood, the surfman must be on hand on September 1st and make a written promise to remain till April 1st, and must fulfil that promise under pain of forfeiture of his wages. Let us take one example. On that 40-mile stretch of Cape Cod there are ten stations. seventy-one surfmen employed at these stations must, according to law, be engaged from "the immediate vicinity." Now, about the only business they have been employed in from childhood up is fishing, but, if we have been rightly informed, the "active season" for fishing is not May and June, but considerably later. During these four months, then, the surfman will frequently, if not generally, be leading a shiftless life, with little or no means of providing for his wife and family. It is time this system were changed. Let the poor surfmen be employed the year round, and their wages, as well as the wages of the keepers, be raised,

and if the United States Government is too poor to do this let it sell out to somebody else that will be able to manage its funds better.

This is the general feeling among those who have watched the workings of the system, and the general superintendent himself has not failed, on several occasions, to call the attention of the government to the subject.

"While the record of the year (1889–1890) shows the maintenance of the high standard of efficiency in the saving of life and property that has in years past distinguished the service, it must be said that it is doubtful whether this condition of affairs will continue to exist in view of the growing dissatisfaction with the rates of pay now allowed by law which is daily becoming more manifest among the crews. Considerable embarrassment has been caused by the resignation of some of the oldest and best keepers and surfmen, who, unable in many instances to provide adequately for the support of their families, are leaving the service to accept more lucrative employment elsewhere. Especial difficulty in this regard has been experienced on the great lakes, where more than 30 per cent. of the force have left the stations on this account, whose places it has been well-nigh impossible to fill with other than inexperienced, and, in this respect, inferior men. A continuance of this situation must in the end result disastrously."

There are many other points of interest connected with the service, but space is failing us so fast that of what remains we can give only the most important, and even those only very succinctly.

The total cost, a matter of very great interest for the maintenance of the service, during the fiscal year ending June 30, 1890, appears to have been about \$915,000, distributed, in round numbers, as follows:

Salaries of officers and employees at headquarters,		\$37,000
Salaries of district superintendents,		21,000
Salaries of station keepers,		152,000
Salaries of surfmen,		576,000
Pay of disabled keepers and families of dead ones,		2,500
Traveling expenses of officers on special detail, .		8,000
Supplies, repairs etc.,		118,500
		\$015.000

Finally, with all this machinery at work, what have been the results: To save space and to render it more easy to examine and compare them, we put them in tabular form:

Disasters to documented vessels, .							384
Disasters to small craft, yachts, boats,	etc,	•	•	•	•	•	145
							529
Of this number there was totally	lost,						76
Warned off by patrol signals when in	ger,	•	•	227			
Value involved (vessels and cargoes):	:						
Documented vessels,					. 87	7.55	5,908
Small craft,	•	•	•	•			,527
Total value involved,					. \$7	7,617	7.435

Value saved:									
Documented vessels,							. \$5	,451,8	43
Small craft,		•	•			•	•	59,1	102
Total value save	d,				•		. \$5	,510,9	945
Value lost :									
Documented vessels,							. \$:	,104,0	065
Small craft,								2,4	-
Total value lost,					•		. \$2	,106,4	190
Persons involved:									
Documented vessels,								. 3	197
Small craft,									299
Total persons in	volve	ed,						. 34	196
Persons saved:									
Documented vessels,								. 31	159
Small craft,	•		•						289
Total persons sa	ved,							. 34	148
Persons lost:									
Documented vessels,									38
Small craft,									IO
Total persons los	st,								- 8
Persons saved after falling	fron	n wh	arves.	pie	rs, el	с., а	nd w	hen	
bathing,						4		•	27
Persons succored at stations						•			
Number of days of succor af									

We see therefore that by an expenditure of \$915,000, property to the value of \$5,510,945 has been rescued from loss, which means a profit of more than 600 per cent. per annum on the investment. More yet; for, if we reckon in the 227 vessels warned out of danger, and so totally saved, and if we estimate their average value as equal to that of the others (and why should we not?) the profit will rise to about 1000 per cent. Is it, or is it not, worth while for the government to save yearly to the commerce of the country more than nine millions of dollars net? The answer cannot be doubtful. But all that is only incidental and of secondary importance.

The well-defined, and well-understood, and well-fulfilled duty of the Life Saving Service is the saving of human lives. Now, we have seen that out of 3523 (i.e., 3496+27) persons on the point of being lost, the service has saved 3475 (i.e., 3448+27), which is very nearly $98\frac{2}{3}$ per cent., while the number lost was scarcely over $1\frac{1}{8}$ per cent. Suppose that each person saved were spared to live ten years longer (a ridiculously low estimate), the number of years of human life saved to the country would be 35,230, of which each member of the service should be credited with about 140 years annually.

"Tis grand; 'tis more than grand; 'tis glorious."

T. J. A. Freeman, S.J.

Book Jotices.

CARMINA MARIANA. An English Anthology in Verse in Honor of or in Relation to the Blessed Virgin Mary. Collected and arranged by Orbz Shipley, M.A., editor of "Annus Sanctus; Hymns of the Church for the Ecclesiastical Year." London: Printed for the Editor by Spottiswoode & Co. 1893.

Frederick Stokes, in his brilliant introduction to Maitland's Dark Ages, states rather strongly a fact whose general truth has been the subject of much animadversion by the intelligent and educated Catholic body, lay and clerical. He says: "It is hardly too much to say that modern literature as a whole is Protestant. For whatever reason a species of intellectual sterility seems to have fallen upon Roman Catholics within the last two hundred years." But he explains this apparent lack of creative power by the "series of hurricanes" which for centuries past "have swept upon the Latin Church." Nevertheless, it must be a matter of congratulation that in this "season of calm weather" (as Wordsworth puts it),—that is relatively calm—the intellectual power erst given to polemic battles, now exerts itself to great effect and with a visible insistence of increasing force and prestige in the quieter emulation of religious belles-lettres. Our current literature, whether taking the form of review or magazine, is winning not recognition merely but sincerest praise, even from those who are not of the "household of the faith." While this is true and indisputable, still must the candid Catholic heart confess to remissness in one large field of modern literary research—that of Hymnology. What shall explain our so constant and so complete indifference to the exhaustless hymnodal wealth of the Church? Our separated brethren have found therein not merely a source of literary fame, but, better still, a fount of religious emotion, and the blessed calm—momentary, perhaps, but intensely sweet—of spiritual restfulness. Perhaps our very familiarity with that sweetness has dulled the edge of appreciation, or the embarrassment of hymnodal wealth has baffled us. Whatever the cause may have been, it is that converts from Protestantism are almost the only eminent expounders, translators and editors of our great hymnologic treasures, of whom the Crashaw, Dryden, Austin, Caswall, New-Catholic body can boast. man, Shipley are the familiar names that rise immediately to the lips! And while better work has been done in the composition of new hymns, than in the editing of the older ones by Catholics, still even here the names of two converts hold an enviable place-Adelaide Proctor and the many-songed Father Faber.

And so it happens, that, in this age of "lyrics," hymnals, collections we have waited long for a worthy tribute of song to Our Lady, but, happily, our long waiting has been answered at last. The "Carmina Mariana" is a most delightful surprise. It is hardly too much to say that it is an ideal collection of odes, lyrics, poetic meditations, etc., having Our Lady as the theme of inspiration. In the wide fields of Christian song the flowers which have shed the sweetness of devotion to Mary are not only of perennial bloom but of endless variety and richest profusion, and he who would gather even many and many a

nosegay must feel that he has left much beauty still wasting "its sweetness on the desert air." The task of selection must be a labor of love, of piety, and of artistic appreciation. Very fortunately for the devout clients of Our Queen, the present anthology has been just such a labor of love, piety and art. It is such a volume as we might have expected from an editor of Mr. Shipley's well-proved fitness for the task of editing a worthy Marian collection of verse. The title page informs the casual reader of something of this fitness, for the "Annus Sanctus" is a work of enduring merit, and is the result of much critical research. But Mr. Shipley has been identified most prominently, both before and after his conversion to the Catholic faith, with hymologic labors. His three Lyras (Eucharistica, Messianica, and Mystica), published nearly thirty years ago, while he was yet an Anglican clergyman, speak of a long familiarity with at once the drudgery of hymnologic editorship and the fine, critical taste of the accomplished scholar and the pious literary pursuits of a devout heart.

It has been the aim of the editor, as he tells us:

"I. To exhibit, within the compass of a single volume, a considerable body of English verse written in the past, in connection with the

name of Mary; and,

"II. To present translations from foreign languages, of poetry concerning Our Blessed Lady, either of classical reputation in itself or representative of a numerous class, or which bears the special 'imprimatur' of the Church."

"The materials which have been employed to these ends may be speci-

fied more in detail as follows:

"I. Selections of moderate length from the works, original or translated, of the greater English poets, in which reverence for, or devotion to, Mary is united with high poetic achievement.

"2. Shorter poems, mostly lyrical, many of which have been contributed by writers—English, Irish and American—of the present and past

generation.

"3. Examples or paraphrases from early English sources verbally modernized or printed in modern spelling, although, in a few instances, the

old spelling has been retained.

"4. Translations, old and new, mostly of marked devotional character, from foreign tongues—hymns from the Syriac and Armenian, odes from the Greek, sequences from the Latin, "laude" from the Italian, and sonnets from the Spanish and Portuguese, together with gleanings from other languages. And here have been included certain poems of very ancient date, little known, but of exceptional value, as offering early testimony to the veneration of the Mother of God.

"5. Quotations of, or from, legendary poetry, ballads, carols, elegies, dramatic scenes, passion-plays and Laments of Our Lady, cradle-songs and lullabies, descriptions of celebrated pictures, together with songs,

hymns and prayers in metre, not meant for public use.

"6. Short pieces of poetry from many sources, extracts and fragments, prologues and dedications, and the like—some from authors whose works

do not afford suitable passages for longer quotation."

Mr. Shipley has done his work well. From Chaucer to Tennyson, the magnificent roll of poets has been searched for appropriate treasures. The Egyptian has been spoiled of—or, better, has yielded in generous abundance—religious gems of great value. The tributes to Our Lady found in Wordsworth and Scott are of common knowledge; but we should scarce expect to find so many honored names of Protestant poets in a collection of Catholic verse as we find in "Carmina Mari-

ana." The lesson is an instructive and beautiful one. We can almost sympathize with the children of a chilling Protestant tradition, who, drawn now by the overwhelming attractiveness of Mary's beauty, dignity and prerogatives, and hampered again by the old anti-"Marolatry," imbibed as a spiritual pabulum with their mothers' milk, have, nevertheless, enshrined Mary in some of their best and tenderest verse. George Herbert—whose "Anagram," by the way, we miss in this collection—puts this conflict pretty clearly in his poem "To All Angels and Saints:"

"I would addresse
My vows to thee most gladly, blessed Maid,
And Mother of my God, in my distresse:
Thou art the holy mine, whence came the gold,
The just restorative for all decay
In young and old;
Thou art the cabinet where the jewel lay:
Chiefly to thee would I my soul unfold,
But now, alas! I dare not."

Alas! and again alas! he does not seek the aid of her prayers whose mere hint to Her Divine Son caused Him to work His first miracle, even before His time had come for manifesting His power to the world! And there are many like tender-rhythmed Herbert, who would, but dare (!) not.

If we should begin to quote from the "Carmina"—and the itching is strong thereunto—we should find ourselves rehearsing the volume! For in simple truth, we have never seen such an artistic and devotional repertory of Catholic verse. Nearly all ages and climes and schools and varieties of rhythm and poetic form have found elegant representation. The fine literary gift and critical study of the compiler are evidenced not alone by the selection of poetry, but as well in the judicious notes appended to some of the hymns. He has been at great pains, too, to present an authentic and reliable copy of variant poems; his proof-reading is perfect, and the typography exceedingly attractive. The whole volume is a triumph of the printer's art. Even in its material aspect we prefer "Carmina Mariana" to Schaff's elegant anthology, "Christ in Song," or Henry Fish's large volume, "Heaven in Song."

In conclusion, the present reviewer ventures to intrude a personal predilection suggested by his theme. In the midst of so many names of Celtic bards who have sung the praises of Mary, he desiderates that of the tender, devout, but ill-starred Mangan; a few stanzas from his fine translation from the German, "Mary, Queen of Mercy," would serve art no less than piety, and would enshrine in many a heart the "dream-encircled" mystic whom cultured Irishmen, by a consensus of opinion, place on the very pinnacle of Ireland's "House of (poetic) Fame."

THE PRINCIPAL WORKS OF ST. JEROME: translated by the Hon, W. H. Freemantle, M.A., Canon of Canterbury Cathedral and Fellow of Balliol College, Oxford. New York: The Christian Literature Company. 1893.

This forms the sixth volume of the "Select Library of Nicene and Post-Nicene Fathers," edited by Drs. Schaff and Wace, and for many reasons may he pronounced the most valuable member of the series.

When we consider the sturdy individuality of the *Doctor Maximus*, his superiority in erudition over the other Fathers of the Church, and the weight and permanence of the influence which he has exercised upon the Christian world, it is quite startling to be reminded that this is "the first translation of Jerome into English"; and this notwithstand-

ing the fact that, with the exception of St. Augustine, no Father has been so frequently quoted from and appealed to by preachers and writers, and that his crisp, vigorous sentences are ever ringing in our ears as the most forceful enunciations of distinctively Catholic truths.

For if ever there existed a typical "Romanist" in the strictest acceptation of the term,—a loyal servant of the Pope, a monk bound by irrevocable vows to chastity, vigils and fastings, and glorying in his spiritual chains; a priest with lofty notions as to the dignity and powers of the Christian priesthood; a staunch believer in the reality and frequency of contemporary miracles; a fond reverer of relics and holy places; an enthusiastic eulogist of the superiority of virginity and a chivalrous defender of the honor of Mary,—surely that man's name was Eusebius Hieronymus Stridonensis. "He ranks," says Canon Freemantle, "as one of the four Doctors of the Latin Church, and his influence was the most lasting; for, though he was not a great original thinker like Augustine, nor a champion like Ambrose, nor an organizer and spreader of Christianity like Gregory, his influence outlasted theirs. Their influence in the middle ages was confined to a comparatively small circle; but the monastic institutions which he introduced, the value for relics and sacred places which he defended, the deference which he showed for Episcopal authority, especially that of the Roman Pontiff, were the chief features of the Christian system for a thousand years; his Vulgate was the Bible of Western Christendom till the Reformation."

There is, to be sure, a great deal of rhetorical exaggeration in this estimate of the four great Fathers; but this is easily pardoned in one who has for many years been so admiring a student of Jerome as the Canon of Canterbury. St. Augustine and St. Gregory were both of them monks, and would have continued to be monks until death, had they not been dragged from their cells to fill Episcopal thrones; and they and St. Ambrose valued relics and sacred places as highly, and sought them as eagerly, and defended them as strenuously as did St. Jerome. The main difference between the three great Bishops and Jerome consists in this, that whilst they were so distracted with public affairs that their asceticism is apt to be lost sight of, Jerome was from first to last a monk and nothing more.

It puzzles us, therefore, to understand what comfort a Protestant can find in turning over the burning pages of old Jerome, every line of which is, in anticipation, an indignant outburst against, and a powerful refutation of, everything which Protestanism holds dear. We have no doubt that, before this, Drs. Schaff and Wace have received many an irate protest against using the press of the "Christian Literature Company" for the propagation of such rank Popery. Open the book anywhere and you will read such intolerable language as the following: "In every act we do, in every step we take, let our hand trace the Lord's cross."

"There is no such thing as a Church without Bishops."2

"We ought to remain in that Church which was founded by the Apostles and continues to this day. If ever you hear of any that are called Christians taking their name not from the Lord Jesus Christ, but from some other, for instance, Marcionites, Valentinians, men of the mountain or the plain (add Lutherans, Calvinists, Zwinglians), you may be sure that you have there not the Church of Christ, but the synagogue of Antichrist. For the fact that they took their rise after the foundation of the Church is proof that they are those whose coming the Apos-



tle foretold. And let them not flatter themselves if they think they have scripture authority for their assertions, since the devil himself quoted Scripture, and the essence of the Scriptures is not the letter,

but the meaning,"1

We might go on till we had transcribed the entire volume. That the task of presenting this "first translation of Jerome into English" was uncongenial to a Protestant, is evidenced by the assurances which the translator has taken care to scatter through the book that he does not agree with his author. These uncalled for remarks of the learned Canon, we venture to say, detract largely from the value of an excellent work. The book appeals not to the Protestant but to the Catholic mind, and Catholic directors of consciences will think twice before recommending the book indiscriminately until the translator's irrelevant remarks are expunged; and since it is safe to predict that the volume will never be warmly recommended to the Protestant public, there is danger of its falling between two stools, which were a great pity, for it is an admirable and, so far as we have read, a remarkably faithful translation.

Why does Canon Freemantle persist in asserting that St. Jerome, in his laudation of virginity, has spoken disparagingly of the holy state of matrimony, since the saint has been so careful to forestall any such interpretation of his words? Jerome's doctrine is precisely identical with the doctrine of every Catholic from St. Paul down to the present day, viz., that marriage is good and virginity better. "Some one may say," remarks the saint, "Do you dare detract from wedlock, which is a state blessed by God?" I do not detract from wedlock when I set virginity before it. No one compares a bad thing with a good. Wedded women may congratulate themselves that they come next to virgins." "I beseech my readers," he says again, "not to suppose that in praising virginity I have in the least disparaged marriage, and separated the saints of the Old Testament from those of the New."

Is takes away one's breath to hear a Protestant accusing the Catholic Church of "bringing marriage into disesteein." Disesteem, forsooth! The degradation of modern marriage dates from the unholy unions of apostate monks and nuns and the repudiation of lawful wives by adulterous monarchs in the sixteenth century. Then were Christian people taught for the first time that matrimony is no sacrament, but a mere contract like any other. Then divorce began its baneful reign. And

this was bringing marriage back into esteem!

It was the Catholic doctrine, everywhere illustrated by the example of so many noble souls, of the possibility and excellence of virginity, which nerved the Church in her great struggle to crush out divorce. If thousands of Christians voluntarily embraced a celibate life, where was the hardship, she could say, if men or women, forced to live separately from their consorts, were commanded to remain as if unmarried. This consideration is a powerful argument among Catholics to the present day. Let all whom it concerns ponder the terms in which St. Jerome has proclaimed the indissolubilty of marriage. "A husband may be an adulterer or a Sodomite; he may be stained with every crime and may be left by his wife because of his sins, yet he is still her husband, and, so long as he lives, she may not marry another." And the member of a Church which connives at divorce dares to accuse St. Jerome and the Catholics of bringing marriage into disesteem!

But we ought not to be too severe with one who has done a good work and done it exceedingly well. Everything which tends to make

¹ P. 334. ² P. 29. ³ P. 344. ⁴ P. 110.

people better acquainted with the Fathers will accrue to the advantage of Catholicity, their genuine offspring. May this volume have a wide circulation; may it set many to do a great deal of independent thinking; and may the saint intercede in heaven for the learned man who has loved him and studied him, though painfully conscious that he is no member of the Church of Jerome, Augustine, Ambrose, and Gregory.

By the way, how could the Canon commit the egregious blunder!

of making Chrysostom Bishop of Antioch in 387?

THE MARRIAGE PROCESS IN THE UNITED STATES, By Rev. S. B. Smith, D.D. New York, Cincinnati, Chicago: Benziger Brothers. 1893. 8vo., pp. 435.

This is a very valuable and timely work on the important subject of which it treats. Marriage being essentially a contract, though of a very special and sacred kind, and among Christians a Sacrament, to be valid, must fulfill all the conditions required for a valid contract. The consent of both the contracting parties must be free and deliberate; it must be expressed in the way required or permitted by the Church; and the parties themselves must be such as are capable of entering into such a relation. Now, according to the laws of the Church, various classes of persons are not thus free or capable. There are, as is well known, fifteen or more annulling impediments, such as a prior existing marriage, solemn vows, sacred orders, relationship by blood or marriage within certain degrees, certain kinds of crime, insanity, want of age, force and fear, etc., any one of which, if it existed at the time of the marriage, would render it null and void from the beginning. The existence of such an obstacle ought to be and as a rule is sufficiently inquired into before marriage, but sometimes it will happen that it is discovered only after the ceremony has taken place and then either a dispensation has to be procured, if possible, and the marriage rehabilitated, or the parties must be separated and a declaration of annulment pronounced by the proper authorities. Exact information on these matters will be found amply, yet succinctly, given in the work before us.

Until recently in this country the Church authorities as a rule investigated and decided questions relating to this subject informally and extra-judicially, usually as cases of conscience in connection with the Sacrament of Penance, when of necessity the facts were stated only as they were known, or appeared, to one of the parties. Such decisions, while sufficient to guide the consciences of persons acting in good faith, must have been at times at variance with the true facts of the case, or with the law bearing on it, and so prejudicial to the rights of other parties and to the rights and dignity of the Sacrament of matrimony itself. Accordingly in 1883 Propaganda issued an "Instruction" requiring the general law of the Church in regard to cases of this kind to be observed in this country also and that whenever the validity of a marriage already contracted should be called in question, sentence should be given only after a regular judicial process or trial had been held according to certain rules and directions which it gives in detail. This "Instruction" prescribed the mode of constituting the court, the method of conducting the examination of parties and witnesses, of keeping the records, giving sentence, making appeals, etc. The "Marriage Process" has thus become obligatory in every diocese of this country when a case of the kind referred to arises and we have no doubt that all whose duties oblige them to take any part in it, and others also will gladly welcome

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Dr. Smith's learned and exhaustive work on the subject. They will find in it not only a complete and accurate exposition of the "Marriage Process" proper, but a useful and reliable embodiment of the conclusions of the best and latest writers on the general subject of which it forms a part.

We have noticed but a very few points, and those of minor impor-

tance, in which we think the author either inexact or mistaken.

On the question of the competency of the bishop of the diocese where a marriage was celebrated, but in which the parties do not reside at the time the action for annulment is instituted we do not think that those who hold the affirmative generally limit it to the case in which the defendant happens to be found in the diocese at the time the action is commenced. Gasparri, indeed, says so, and refers to a decision of S. C. C., Neopolitana seu Romana Matrimonii, etc., January 30, 1858, the text of which we have been upable to see; but two centuries ago no such limitation seems to have been thought of, as appears from Lacroix, lit. vi., par. iii., n. 430, where we read as follows: "Si conjux unus agat contra alterum ad dissolutionem matrimonii, aliqui voluerunt judicem competentem esse solum episcopum loci inquo contractum est matrimonium, 1. quia per contractum in aliquo loco celebratum sortitur quis forum. 2. Quia es E contra Krimerus, n: 1660, probabilius dicit judicem hic competentum esse etiam episcopum domicilii, hujus enim jurisdictioni etiam subjacet, et nihil novi est quid quis habeat in pluribus locis forum. Hinc resp. ad 1, non ides excludi episcopum etiam domicilii, si apud hunc conveniatur."

We think the difficulty has arisen from forgetting the distinction in Roman law between the terms conveniri and defendi; a person could not be said to be consentas, unless he were personally present, but he might be a defendant and obliged to make answer in certain cases through a procurator, attorney, etc, even when absent. This is borne out also by cap. Romana, de for. comp. in § 6 Contrahenter, and by its gloss., of which the first part only, that which treats of convenientia in its technical legal sense is quoted by Perhing and after him by Gasparri.

The author, after stating, p. 180, that the bishop "is free to sit personally in court in matrimonial causes, or to appoint others to do so in his stead," goes on to say that "he is also at liberty to give these delegated judges power to hear and pronounce final sentence upon the cause, or only to hear or try it; and to reserve to himself the final decision or sentence." This is true; but in the latter case, they cannot be called delegated judges, but auditors merely. The duty of an auditor is to hear and report, while the office of a judge, whether ordinary or delegated, always includes the pronouncing of sentence. It is needless to quote authorities on a point so obvious.

The Council of Baltimore (Third Plenary) on this matter seemed to prefer rather the "Instructio Austriace" drawn up by the late Archbishop of Vienna to suit the peculiar circumstances of the Austrian Empire; the Austrian instruction, however, differs essentially from that of Propaganda in many particulars, and was never officially approved at Rome, as appears from the significant correction by Propaganda of the words "Romae probatam" applied to it by the Council of Baltimore into "a gravibus theologis et canonistis Romanis, licet solo privato sur judicio, commendator," as they stand at present.

We may here mention the following point upon which we have heard some differences of opinion, but which has not been touched on by any writer that we have seen, and might in some cases cause some embarrassment: In case the courts both of first and second instance decide against

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the validity of a marriage and the defendant spouse acquiesces, but the defensor vinculi of the first court is not satisfied, can he appeal from the sentence of the court? Our own opinion is that he cannot; we think that any further appeal in such a case is left entirely to the conscience and discretion of the defensor vinculi of the second court. We should be pleased, however, to see the point decided by some other authority.

We need not say that Dr. Smith has brought his work up to date, but we may call attention to the recent decree of the Holy Office (June 3, 1889), found on page 352 of the present volume, which does away with the necessity of an appeal by the defensor vinculi from a decision of a court of first instance in certain cases in which the invalidity of the marriage is "clearly evident and certain,"

THE CATHOLIC PRIESTHOOD. By Rev. Michael Müller, C.S.S.R. Benziger Bros. New York, Cincinnati and Chicago. 2 vols.

This is a new edition of Father Müller's valuable work on the Catholic priesthood first issued in 1885. The work is in two volumes, each volume divided in two parts. Part I, treats of the great dignity of the priesthood and on the vocation necessary for it. Part II, is devoted to the private life of the priest. Part III, speaks of the public life of the priest. Part IV. describes what may be called the mixed life of the priest. The judgment we formed of the work when it was first published has gained strength with every new reading of the same. Intensely practical, devout, elevating, full of consolation, at once learned and pious, these volumes should be in the library of every priest, not simply for spiritual reading, but for meditation and serious study. Of the many works of Father Müller, these easily take the first rank. They are a compendium of pastoral theology. There is nothing in a priest's daily life, whether private or public, which has been neglected. The learned author shows how extensive has been his reading and how admirably he has digested the vast materials at his disposal. The language is plain, sincere, even severe at times, but always full of charity. We are sure that those of the clergy who have not read the work will thank us for calling their special attention to its value, and, having read it once, will often take it up again to study its pages. The author speaks of it in his preface as the result of "my labors of thirty-two years, as an offering which I make (to my brethren of the clergy) to show the deep reverence and love which I have always entertained for their exalted dignity; for it is fitting, says St. Thomas, that an offering of the fruits of our labors should be made to priests, and thereby contribute towards filling the ranks of the clergy with more and more worthy and capable It is an admirable work for the clergy, and should be used in every seminary for the instruction, especially, of the theologians.

ELOCUTION AS AN ART; ITS PRECEPTS AND EXERCISES, Arranged for Colleges and Academies, By a Member of the Dominican Order. New Orleans Dominican Academy, St. Charles Avenue. 1893. pp. viii. -216.

This is a slender volume, but its merits are far beyond its size. The instructions are practical. The chapter on articulation is especially valuable. Every letter and every syllable has its peculiar sounds brought out. Noteworthy is the number of exercises upon the most difficult combinations of sounds that our guttural, spluttering language could produce. This chapter is alone sufficient reason for adopting the book. The boy or girl who has been drilled in its exercises will find little dif-

ficulty in reading and speaking with that distinctness of utterance, and that measured tone, which bespeak the cultured person. The chapter on vocal defects—stammering, lisping, stuttering, and the like—supplements that on articulation, and is no less important. The exercises are admirable. The selections are made with good taste, and the explanations and accentuations accompanying them are real helps towards grasping their meaning. See, for instance, the remarks introducing what the gifted author calls "Tennyson's glorious dithyrambic" (p. 156), the "Charge of the Light Brigade."

The Dominican nun who has written this book, and has tested its rules with her class during many years before publishing them, is to be congratulated upon having produced one of the most useful and practical manuals of elocution that we are acquainted with. Why not place upon the book the imprint of a regular publisher, so that it may reach

a larger audience?

DIE VEREINIGTEN STAATEN NORD AMERIKAS IN DER GEGENWART. Von Claudio Jannet und Dr. Walter Kaempe. Freiburg and St. Louis: B. Herder. 1893. Price, \$3.

It is sometimes of great advantage, and sometimes of very little, "to see ourselves as others see us." The latter is generally the case when "scientific" foreigners undertake to draw a picture of the institutions and customs of a great nation. Jannet was unfortunate in the epoch (1873-1877) when the spirit moved him to embark upon the task of describing life in the United States. Opinions in France at that period were, in Catholic circles, highly undemocratic, and it looks as if he had proposed to himself to demonstrate to his countrymen that popular sovereignty was a fraud and a failure. On this side of the Atlantic, radicalism, carpet-baggery, and bankruptcy were the chief topics of the hour. Hence, his portrait is amusing as a caricature, but of little or no "scientific" value. We fail to see all the excellencies which the German translator has discovered in the book, or why Jannet, instead of Bryce, was chosen to give visitors to the Columbian Exposition from the Fatherland a preliminary idea of the sort of country they were about to travel in. Whether democracy be desirable or not in Germany or France, is a question which concerns us remotely; it works extremely well in America, and the nation is in no discernible danger.

LITERARY, SCIENTIFIC AND POLITICAL VIEWS OF ORESTES A. DROWNSON. Selected from his Works by Henry F. Brownson. New York, Cincinnati and Chicago: Benziger Brothers. 1893.

In publishing this volume Dr. Brownson has done a service to the cause alike of religion and of American literature second only to that which he has already rendered in publishing the complete works of his illustrious father, Dr. Orestes A. Brownson. He has thus brought Dr. Orestes A. Brownson's most valuable thoughts on subjects of vital importance within the reach of readers who are deterred by their cost and size from purchasing and reading the twenty volumes which the complete edition of Brownson's works comprises.

SAINT THOMAS OF CANTERBURY AND SAINT ELIZABETH OF HUNGARY: Historical dramas. By Clement William Barraud, S. J. London and New York: Longmans, Green & Co.

This book has reached us just as the last form of the QUARTERLY was being made ready for the press. We have, therefore, only room and

time to say that, from a cursory perusal of the work, we are of the opinion that it portrays St. Thomas of Canterbury and St. Elizabeth of Hungary and the times in which they lived, more faithfully and successfully than do most of the other dramas which have these two great and glorious saints as their chief personages.

BOOKS RECEIVED.

[Some of the books mentioned under this head were received too late for careful examination; notices were prepared of a number of others, but have been omitted, owing to lack of space to insert them. The mention of their titles here does not preclude further notice of them in a subsequent number of the REVIEW.]

- THE POSITION OF THE CATHOLIC CHURCH IN ENGLAND AND WALES DURING THE LAST TWO CENTURIES. Retrospect and Forecast. Edited by the XV. Club. With a Preface by the Lord Braye, President of the Club. London: Burns & Oates. New York: Catholic Publication Society Company.
- THE BLESSED SACRAMENT, AND THE CHURCH OF ST. MARTIN AT LIEGE. By Dears Cruls. Translated by permission of Monseigneur Doutreloux, Bishop of Liege. By William S. Preston. New York: The Catholic Publication Society Company. London: Burns & Oates,
- HISTORICAL SKETCH OF THE AUGUSTINIAN MONASTERY, COLLEGE AND MISSION OF ST. THOMAS OF VILLANOVA, Delaware County, Pa., during the First Half-Century of their Existence. Compiled by Rev. Thomas C. Middleton, D.D., O.S.A. Published by Villa Nova College. 1893.
- SHORT SERMONS ON THE EPISTLES FOR EVERY SUNDAY IN THE YEAR. By the Very Rev. N. M. Redmond, V. F. New York: Fr. Pustet & Co. 1893.
- REMINISCENCES OF EDGAR P. WADHAMS, First Bishop of Ogdensburg. By Rev. C.

 A. Walworth, Author of "The Gentle Sceptic," "Audiatorocte, and Other Poems," etc. With a Preface by Right Rev. H. Gabriels, D.D., Bishop of Ogdensburg. New York, Cincinnati and Chicago: Benziger Brothers. 1893.
- THE DEVOUT YEAR. By Richard F. Cherke, S. J. Short Meditations for Advent. Christmas, March, Lent, Easter, May, The Ascension to Corpus Christi, June, July and November. New York, Cincinnati and Chicago: Benziger Brothers-1893.
- THE CATHOLIC DOCTRINE OF FAITH AND MORALS, gathered from Sacred Scripture, Decrees of Councils, and Approved Catechisms. By Very Rev. William Byrne, D.D., Vicar-General of the Archdiocese of Boston. With the Sanction of His-Eminence, the Cardinal, and other Church Authorities. Boston: Cashman, Keating & Co.
- FIFTY-TWO SHORT INSTRUCTIONS IN THE PRINCIPAL TRUTHS OF OUR HOLY RELIGION. From the French, by the Rev. Thomas F. Ward, Rector of the Church of
 St. Charles Borromeo, Brooklyn, N. Y. Cincinnati, New York and Chicago:
 Benziger Brothers.

TO OUR CONTRIBUTORS.

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THE EDITOR.

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THE LIMITS OF PAPAL INFALLIBILITY.

In presuming to present a few considerations on the above heading, it is not my intention to minimize, but rather to define, the extent of papal infallibility. I do not assume the task of proving the dogma of the infallibility. I take it for granted, and suppose it to be a revealed truth, which all Catholics are bound to believe, as defined by the Vatican Council in the following terms:

"The Roman Pontiff, when he speaks ex cathedra, that is, when discharging the office of pastor and teacher of all Christians, in virtue of his supreme apostolic authority, he defines a doctrine on faith or morals, to be held by the universal Church, by the divine assistance promised to him in blessed Peter, possesses that infallibility with which the divine Redeemer wished His Church to be endowed in the definition of doctrine regarding faith or morals; and therefore the definitions of the Roman Pontiff are of themselves, and not owing to the consent of the Church, irreformable."

Here there is manifestly question of doctrinal, not moral, infallibility—not by impeccability, omniscience, inspiration, revelation or other supernatural or preternatural gift, but in virtue of the divine assistance, which under certain conditions, according to the promise of the Saviour, infallibly secures the supreme pastor of all the faithful from error in teaching and expounding Christ's doctrine. For those who, through affected ignorance or malice, would still persist in interpreting papal infallibility as sinlessness, or as universal political sway over the Christian and non-Christian world, or as an apotheosis of the Pope, or as anything else than doctrinal inerrancy in a certain capacity and under certain ad-

¹ Const. de Ecclesia, c. 4.

juncts,—for such I have not a word to lose. My sole task will be, as far as possible, to establish the limits of papal infallibility from the tenor of the definition itself. In so doing I do not pretend to produce anything new; but I trust to be able to make an old truth better understood to some by bringing within small compass, and presenting in intelligible form, much that is only to be found scattered through many bulky volumes of Latin.

The limits as well as the extent of papal infallibility, as contained in the Vatican definition, may be determined from four different heads.

- 1. From the intention of the sovereign Pontiff or the capacity in which he pronounces his decisions or definitions.
- 2. From the person or persons to whom such decisions or definitions are directly or indirectly addressed.
 - 3. From the subject-matter of such papal utterances.
 - 4. From the form in which they are couched.

I.

First, I say, certain conditions are required on the part of the Pope personally. He must speak as the teacher and pastor of all the faithful, and have the intention of defining ex cathedra. Pope as a private individual or private teacher is not infallible. Accordingly he is not infallible in his private conversation, or in preaching to the people, or in lecturing on theological matters, or writing books on sacred subjects. Neither is he infallible in solving doubts of conscience for individuals, or for special classes or communities in particular cases. Discourses, dissertations, books, private decisions, pronounced or written by a Pope must certainly have a very high theological authority, owing to the exalted position, august character, and rare facilities of their author, as have, for instance, the learned works of Benedict XIV.; yet they can put no claim to infallibility, since the Pope in those cases acts in the capacity of a private teacher. In order that the Pope's utterances may be infallible, he must act in his official capacity as the supreme and authentic teacher of all the faithful. His utterance must be official and authoritative.

Nor is this enough. The Pope must have the *intention of binding the whole Church*. For if he speaks only as a father, friend or adviser, who gives good counsel without any intention of imposing an obligation, though his official capacity may appear in his utterance, yet such pronouncements are not *ex cathedra*, since they do not of themselves impose the duty of believing upon the faithful. Though such utterances are to be received with reverence, they are not infallible. The Pope must really intend to impose an *obligation*, not merely to give some directive advice.

But not every obligation is sufficient. No true Catholic will deny that the Pope intends to impose, and really imposes, an obligation on the whole Church by minor decisions and utterances that are not cx cathedra, and that the faithful are bound in conscience to give their internal and religious assent to such doctrinal decisions, though this assent may not, in all cases, be absolute and final, but only hypothetical and temporary—i.e., with this restriction: unless, and until, the Church teaches, or permits to teach, otherwise. Such internal, religious, though conditional assent, we take it, was due to the decrees of the Inquisition in regard to the Copernican system, until the latter was scientifically established, and practically permitted by the Church—though the decrees of the Inquisition are not strictly pontifical decisions.

In order that a decree or decision may be ex cathedra, therefore, it is not enough that the Pope should intend to impose an obligation, but the obligation must be final, absolute, unchangeable. It must be such that no earthly court can repeal, amend, or reconsider it, except for the purpose of reaffirming it. In other words, the Pope must use "his supreme apostolic authority," he must use that absolute power of binding conferred upon him by Christ in the person of St. Peter as the universal teacher, ruler and pastor of the entire flock. Whatever he thus binds in virtue of his supreme power on earth is bound also in heaven; and no man has the power to loose it; consequently, his decrees thus issued are irreformable.

To sum up the conditions necessary on the part of the Pope, in order that his decisions may be ex cathedra, and therefore infallible, he must act, not as a private individual, but as the authentic teacher of all the faithful. He must not only act as an authentic teacher, but he must also intend to impose an obligation of assent on the faithful; and, moreover, this obligation must proceed from the fulness of his apostolic authority, and therefore be final and unconditional. Koma locuta, causa finita est.

H.

I said that the limits of papal infallibility may be determined also by the person or persons to whom his utterances are either directly or indirectly addressed. An ex cathedra definition may be addressed directly to one, or to many, or to the whole Church. It matters little to whom it is immediately directed, but indirectly, at least, it must be addressed to the entire Church, for it is only in the case in which he addresses the whole Church that the Pope acts as the "pastor and doctor of all Christians," and that he defines a truth "to be held by the whole Church." That it is not necessary that a definition ex cathedra should be directly addressed

to the whole Church is manifest from many examples. Thus, the Epistle of St. Leo the Great to Flavian is admitted by all theologians to be a dogmatic definition, although it is directly addressed to an individual. So, also, the Epistle of Pope Agatho on the two wills in Christ is addressed to the emperors of the east. And the Epistle of Celestine I. against the Semipelagians is directed to the bishops of Gaul. These documents, though addressed to one or a few, were intended as a rule of faith for the entire Church, and, being general authentic declarations of the Catholic faith, they could not but carry with them a universal obligation.

It does not follow, however, as we have already seen, that every doctrinal declaration issued by the Pope to the universal Church is an ex cathedra document, as the other conditions stated above must also be verified. Yet it must be borne in mind that encyclicals, allocutions, apostolic letters, and other papal utterances that are not ex cathedra often contain infallible truth, inasmuch as they propose with practical, moral certitude, doctrines that are of Catholic faith, and thus testify the belief of the entire body of the faithful and of the teaching Church. Thus, though we may not regard the encyclicals of Leo XIII, on Christian Marriage (February 10, 1880), for instance, or on the Christian Constitution of States (November 1, 1885), as ex cathedra utterances, yet we cannot deny that they practically testify with the most rigorous moral certitude the universal belief of the Church on many truths, and that they consequently supply on many points a practically infallible norm of Catholic belief. The same may be said of apostolic letters addressed to individuals, such as, for instance, the letter addressed by Leo XIII. to the Cardinal Vicar of Rome (June 26, 1878) on the necessity of Catholic schools for the education of Christian vouth.

Besides, such declarations, whether addressed to individuals or to the entire Church, though not ex cathedra utterances, may, by the subsequent approval of the universal Church, become actually infallible documents, as the expression of the consensus of the entire teaching Church and of the belief of the faithful. As such we might regard a good number of the encyclicals, allocutions, and letters apostolic of Leo XIII. and Pius IX., abstracting from the question whether or not they are ex cathedra pronouncements, such was the unanimity with which these apostolic utterances have been received, taught, and believed by the entire Church. Now, the Vatican Council teaches us that we are to believe all those truths which are contained in Revelation, and which the Church proposes to our belief "whether by a solemn definition or by its ordinary and universal teaching office." This ordinary and universal teach-



¹ Const. de fide, cap. 3.

ing office of the Church is the entire body of the bishops in union with the supreme pastor of all Christians. Wherever this consensus of the teaching Church is manifested, we have an infallible criterion of Catholic truth.

III.

We come now to the third and most important point for the determining of the limits or extent of papal infallibility,—the subject-matter of papal definitions. What is the subject-matter of the Pope's supreme and infallible teaching office? To this question we can answer in general with the Vatican Council. that the subject-matter of the teaching office of the Pope, and therefore of his infallibility, is coextensive with the teaching office and the infallibility of the Church itself. "Ea infallibilitate pollet, qua divinus Redemptor ecclesiam suam in definienda doctrina de fide vel monbus instructam esse voluit." In other words, the infallibility of the Pope extends to all questions of faith and morals, that is, to all those things which, in the dispensation of God, we are to believe and to do in order to gain our last end.

To the doctrine of faith and morals belong, in the first instance, all revealed truths, the entire deposit of faith. That the Church, and, consequently, the Pope, is infallible in teaching, defining, proposing, and defending the deposit of faith is manifest from the promise of Christ to his Apostles and their successors: "Going, therefore, teach ye all nations . . . , teaching them to observe all things whatsoever I have commanded you; and behold I am with you all days, even to the consummation of the world." In these words the Saviour guarantees to His Apostles and their successors His never-failing assistance while tracking all things, which He commanded them to believe and to do, that is, the entire deposit of truth in regard to faith and morals. For this same end He promised and communicated to them the Holy Ghost, the spirit of truth, who was to abide with them forever and to teach them all truth and to bring all things to their mind whatsoever Christ Himself had taught them.⁸ Hence He sealed their teaching with the gift of miracles. "They, going forth, preached everywhere, the Lord working withal and confirming the word with signs that followed." 4 He identifies their teaching with His own. "He that heareth you heareth Me; and he that despiseth you despiseth me." He pronounces the sentence of condemnation on those who refuse to believe their teaching: "He that believeth not shall be condemned," which

¹ Const. de Eccl., c. 4.

⁸ John xiv., 16, 26.

⁵ Luke x., 16.

² Matt. xxviii., 19, 20.

⁴ Mark xvi., 20.

Mark xiv., 16,

would be an unwarrantable punishment in the supposition that the Apostles and their successors, the teaching Church, could err in the teaching of divine revelation. In fact, if the Church, and, consequently, the Pope, were not infallible in teaching, defining, expounding, and defending the deposit of revelation, its infallibility would be but an empty sound, without meaning or import, since this is the precise end for which the prerogative of infallibility was conferred by Christ on His Church.

But if the Church, and also the Pope, is infallible in the propagation and preservation of Christ's doctrine or of those truths that are directly revealed, it follows that it is also infallible in the definition of all those truths that are necessary for this end, though they may not be directly revealed. For if the Church has the right to the end, that is, to the effectual preservation and defence of the deposit of faith, it has also the right to the means necessary for this end. But in order efficaciously to preserve and defend the deposit of faith, it is necessary also as a means to defend those natural truths on which revelation is based; and if the Church is infallible in pursuing its chief end, i.e., the custody of the deposit of faith, it must be infallible also in adopting the necessary means for this end. Hence we must say that the Church, and therefore also the Pope, is infallible in defining and defending those nonrevealed truths that are in such wise connected with revealed truth that their denial would logically involve the denial of revelation itself wholly or in part, or at least endanger the faith. Such truths are chiefly dogmatic facts, and the true interpretation of dogmatic texts of human origin.

Dogmatic facts are certain truths or facts, which are necessarily presupposed as the foundation or condition without which certain dogmas could not exist. Such are, for instance, the authenticity of the Scriptures, the legitimacy of Œcumenical Councils, the validity of papal elections, the historic truth of the miracles of our Lord, and of the Gospel narratives generally, the veracity of the senses in perceiving external facts, the unity of the human species or the descent of our entire race from one man and one woman. Deny these facts or truths and the fundamental dogmas of religion come to nought. The divinity of Christ, the institution of the Church, the inspiration of the Scriptures, original sin, the doctrine of the redemption—in a word, the whole Christian religion falls to the ground with these few fundamental truths.

It is evident, therefore, that the Church could not efficaciously guard and defend the deposit of faith unless its infallible teaching office extended also to such dogmatic facts. Infallibility in the teaching, defining, and defending of dogmatic truth without infallibility in judging of the rational foundations on which they are

based would be simply illusory. Without this infallibility in judging of dogmatic facts the deposit of revelation would be a fabric without a foundation, a castle in the air. Hence we must conclude that the Church is infallible in defining all those truths that are necessarily supposed or required, for the understanding, exposition and defence of revealed truth. Truths thus defined by the Church, though not directly revealed, and therefore not of divine faith, are none the less certain than if they were contained in the deposit of faith itself. While revealed truths are firmly and unconditionally accepted on the authority of God (fide divina), such defined dogmatic facts are to be believed on the infallible authority of the Church (fide ecclesiastica). He who would deny such a dogmatic fact defined by the Church, though not technically a heretic would be under manifest error in a matter intimately bearing on divine faith, and guilty of grievous temerity and irreverence toward the Church.

Hence the Church has at all times not only condemned doctrines which were diametrically opposed to revealed truth and therefore heretical, but also such as were simply erroneous, without being heretical, as false, scandalous, ambiguous, misleading, offensive to pious sentiment, etc. Thus, for instance, the propositions of Huss and Wicklif were condemned as partly erroneous and partly scandalous and offensive to pious ears; and the Church exacted of their followers not only simply to renounce the articles of Huss and Wicklif, but also to believe the declaration of the Sacred Council of Constance that those articles were "partly notoriously heretical, partly erroneous, partly rash and seditious."

In like manner, Clement XI., in the Bull *Unigenitus*, solemnly condemns the errors of Quesnell, and enjoins upon all the faithful "not to presume to think, teach or preach on those propositions otherwise than laid down in said constitution." And in a subsequent constitution the same Pope declared all those who refuse to accept that constitution as outside the pale of the Church. Similar declarations are to be found in the Bull *Auctorem fidei* issued by Pius VI. against the doctrines of the Jansenist Synod of Pistoia and in the encyclical *Quanta cura* of Pius IX. We mention these documents with preference because they are all admitted by Catholic theologians to be *ex cathedra* pronouncements, and because they condemn not only heretical, but also *erroneous* doctrines.

From this it follows that the Pope can by infallible definition approve or condemn philosophical doctrines, inasmuch as they are necessarily required for, or opposed, to the true understanding of the truths of revelation. This belongs essentially to the infallible teaching office of the Church, and is consequently within the

scope of Papal infallibility. Therefore the Vatican Council teaches as follows: "The Church, which together with the apostolic office of teaching, has also received the injunction to guard the deposit of faith, has the divinely imparted right and duty to condemn false science, lest any one should be deceived by philosophy and vain fallacy. Wherefore all faithful Christians are not only forbidden to defend as the legitimate conclusions of science, but are absolutely bound to hold as errors bearing the semblance of truth, such opinions as are known to be contrary to the teaching of faith, especially if they have been condemned by the Church."

Here there is manifestly question not merely of heretical opinions, directly opposed to revealed truth, but of error which, though not heretical, cannot be reconciled with divine revelation. But, lest there should remain any doubt on the matter, the council in the closing words of the same constitution adds: "Since it is not sufficient to shun heretical depravity, unless those errors also are carefully avoided, which more or less nearly approach it, we admonish all of the duty of observing the constitutions and decrees in which such false opinions, as are not here expressly enumerated, and have been proscribed and interdicted by the Holy See."

Such philosophic truths, therefore, as are not directly revealed, but are more or less closely connected with revelation must be considered as forming part of the object-matter of the Church's teaching office, not inasmuch as they are merely natural truths, but inasmuch as they are necessary for the custody, development, and defence of the deposit of faith. Hence the following propositions have been justly condemned in the Syllabus by Pius IX: 11. "The Church should not only abstain from correcting philosophy, but should also tolerate the errors of philosophy, and leave it to correct itself." 14. "Philosophy is to be treated without any regard to supernatural revelation." * And the Vatican Council³ declares: " If any one shall say that the human sciences are to be so freely treated that their assertions, though opposed to revealed truth, are to be held as true, and cannot be condemned by the Church: let him be anathema."

Nor does the Church thereby become a teacher of science or philosophy. It is concerned with the natural sciences only in as far as they bear upon revelation, and no further. A philosopher is free to teach the most absurd things, as far as the Church is concerned, provided only his errors are confined to the sphere of the merely natural sciences. In that case the Church allows philosophy to correct itself. But as soon as error encroaches on the field of revealed truth, the Church cannot remain indifferent. It



^{&#}x27; Const. de fide, cap. 4.

³ Const. de fide, c. 4, can. 2.

² Cf. props. 10, 12,

must interpose its *non possumus*; it must call a halt; it must cry: "thus far, and no further!"

Nor is this an inconvenience or a restraint on science. On the contrary, it is a great benefit to science and scientists; for it is no slight benefit to the scientist to know from the very outset that the results of his researches, all the conclusions of his speculations, which are opposed to revealed truth are certainly false, and that careful consideration will show in the case of such discrepancy that he has erred in his investigation. In vain will he endeavor to establish his conclusions against divine truth. Veritas domini manet in aeternum.

So long, however, as there is no peremptory decision of the Church in regard to a scientific point bearing on revealed truth or on the interpretation of the Scripture, the scientist is free to pursue his investigations and to establish a conclusion, which may seem to be at a variance with a received opinion of theologians or interpretation of the Scriptures, provided he do so with due deference to the teaching authority of the Church. If such a conclusion is once scientifically established beyond all doubt, Catholic theologians and interpreters, as in case of the Copernican system, will with the sanction of the Church modify their opinions. But so long as only hypotheses and conjectures are used in lieu of arguments it is vain and presumptuous on the part of scientists to dictate to the teaching Church. Such conduct on the part of scientists is blameworthy, to say the least; and, although their theories may not deserve to be condemned, yet their arrogance deserves to be rebuked. It is only in the case of manifest opposition to revealed truth that the Church makes use of its supreme and infallible authority to condemn the false theories of philosophers; and then the question is settled for every true Catholic, and should be settled also for every true philosopher and scientist. For what is contrary to revealed truth cannot be in accordance with the teaching of reason. Truth is one.

Another class of dogmatic facts, strictly and technically so called, in the definition of which the Church, and also the Pope, is infallible, is the true and objective interpretation of texts of merely human origin, when there is question of revealed truths or of theological truths that come under the Church's teaching authority. That the Church is infallible in the interpretation of the inspired text of the Scriptures goes without saying, since the latter form part of the deposit of revelation, committed to the Church's safe-keeping. The question here is, whether the Church, or the Pope, is infallible in defining the true, that is, the objective, sense of dogmatic texts written without the supernatural impulse and guidance of inspiration—whether, for instance, a certain teaching is objec-

tively contained in a certain book composed by human aid, or whether the words of a holy Father, or the decree of an Œcumenical council, express such or such a truth.

This question assumed a practical aspect in the controversy with the Jansenists. After the five propositions, extracted from the Augustinus of Jansenius, had been condemned by Innocent X. and Alexander VIII. the Jansenists adopted a new species of tactics. distinguished between the question of right and that of fact. They agreed that the five propositions attributed to Jansenius, and condemned by the Church, were false and justly condemned (question of right). In this the Church could not err. But they denied that said propositions were contained in the book of Jansenius entitled Augustinus (question of fact). This being a merely human fact, they said, the Church might err in defining it. The case of one holding this view was submitted to the university of the Sorbonne and sustained by the vote of forty of its doctors; but their decision was condemned by Clement XI., February 13, 1703, in the constitution Vineam Domini, wherein the sovereign pontiff declared: "In order that all occasion of error may be cut off for the future, and all the children of the Catholic Church may learn to hear the Church itself, not merely in silence (for even the wicked in darkness are silent), but with internal submission, which is the obedience of the orthodox man we decree and declare by this our constitution, which is to have perpetual force, that respectful silence is by no means sufficient to comply with that duty of obedience which is due to the aforesaid constitution, [viz., the constitutions of Innocent X. and Alexander VII. condemning the five propositions of Jansenius;] but that the sense of the book of Jansenius which is condemned in the five propositions aforesaid, and which is expressed in their wording, as it runs, is to be accepted and condemned by all the Christian faithful, not only with their lips. but also with their hearts."

And, in fact, the Church has always claimed and exercised the right of judging of the sense of propositions, books and documents of human origin. Thus the Fathers of the Council of Nice condemned not only the doctrine of Arius in general, but also his book, that bore the title of "Thalia," and the "execrable words and expressions he used to blaspheme the Son of God." So, also, Pelagius was called upon by Pope Innocent I. to renounce and condemn the doctrines contained in a book attributed to him as "blasphemous," and "to be condemned and spurned" by all good men.¹ In like manner the Council of Ephesus approved the letter of St. Cyril of Alexandria to Nestorius as orthodox, and con-



¹ Ep. ad quinque Epp.

demned that of Nestorius to St. Cyril as "manifestly at variance with, and foreign to, the faith of Nice." We have another instance in the condemnation of the famous Three Chapters, viz., the writings of Theodore of Mopsuestia, certain writings of Theodore, and a letof a certain bishop Ibas. The Council of Trent exercised the same power in declaring the authenticity of the Latin Vulgate version of the Scriptures, which was evidently a question of the conformity of a text of human origin with the original of the inspired books. In short, the Church constantly exercises this prerogative in all its doctrinal decrees, professions of faith, etc., for when it formulates a dogmatic declaration, or approves of a formula of faith, it implicitly asserts, with the same authority with which it defines or approves, that the doctrine defined or approved is actually contained in the form of words in which it is enunciated, and frequently pronounces the anathema on those who refuse to accept its doctrine as therein contained.

It is also the duty of the Church to preserve the correct form of words in which the dogmas of the faith are proposed to the faithful, according to the admonition of the Apostle to Timothy: "Hold the form of sound words which thou hast heard from me." Hence the Council of Trent 2 defends the propriety and the use of the word transubstantiation to express the mystery of the change of the substance of bread and wine into the body and blood of Jesus Christ in the Holy Eucharist. In fact, if the Church could err in the interpretation of the meaning of human speech as applied to subjects of faith and morals, its infallibility would be ineffectual, all its definitions and decrees would be illusory, its professions of faith would be vain, the forms of its sacraments would be doubtful, every one would be free to distort its teaching to whatever sense he pleased. Hence we must conclude that the Church, if infallible at all, must be infallible in the interpretation of dogmatic texts of human origin.

It must be borne in mind, however, that the Church does not judge of the *subjective* meaning of an author, but only of the *objective* sense of his words. If the author has thought rightly, but expressed himself erroneously, his conscience may justify him, but his meaning will be presumed to be that objectively conveyed by his words; for every one who writes or speaks publicly is supposed to use the words of the language in which he writes or speaks in their ordinary, obvious and natural meaning.

It might be objected that in order to be infallible in the interpretation of texts of human origin the Church and the Pope would have to know all languages. In the first place, I answer that for

² Sess, x ii., c. 4, and can. 2.



^{1 2} Tim, i., 13.

the ordinary teaching office of the Church this difficulty does not exist. The Church, being Catholic, that is, diffused over the entire world, knows all languages and practically meets textual problems as they arise, in regard to the formulating of the articles of faith, the Christian doctrine, the form of the sacraments, the orthodoxy or heterodoxy of certain expressions, etc. If, in the second place, any question is deemed of such importance as to require the infallible judgment either of the entire teaching body, assembled or dispersed, or the Pope ex cathedra, sufficient evidence can be gained on the orthodoxy or heterodoxy of the text in question to secure moral certainty without obliging the Pope or the entire episcopate of the Catholic world to study the language in which the text at issue is expressed. In the doctrinal tribunal of the Church, as in other courts, human testimony has its use and application. There is this difference, however, that in the supreme tribunal of the Church the judge or judges, having the special assistance of the Holy Ghost, cannot err in their verdict or decision in matters of faith or morals.

So much on the doctrinal infallibility of the Church and of the Pope. Is the Pope, it may be further asked, infallible in framing and enacting disciplinary laws, decisions, decrees, etc.? There is of course, question here only of universal laws and decrees, binding the whole Church, in matters of discipline. Such are, for instance, laws regarding divine worship and the liturgy of the Church, fasts and feasts to be kept, the celebration of Christian marriage the celibacy of the clergy, the obligation of hearing Mass, yearly confession and communion, etc. It is here not a question of doctrine but of practice, although the Church's practice is, to some extent, based upon her doctrine. The point at issue is whether the Church or the Pope can in disciplinary matters prescribe anything to the whole Church which is evil in itself, unjust or contrary to revelation. Put in this form the question must be answered in the negative; and in this sense we say that the Church and the Pope are infallible in disciplinary laws and decisions.

The reason is patent. The discipline of the Church, though not directly revealed in its details, is closely connected with revelation, inasmuch as it must be in accordance with the fundamental laws contained in revelation, and inasmuch as any error (i.e., anything immoral or contrary to revelation) in the universal disciplinary laws of the Church would practically imply or lead to a doctrinal error. A universal law, for instance, absolutely refusing reconciliation to a certain class of sinners, though penitent, or imposing the obligation of actual poverty on all Christians, or forbidding the baptism of infants, would naturally suppose or lead to the doctrinal errors that the Church had not the power to forgive all sins:

that private property was unlawful, and that baptism was either not necessary for salvation, or that the baptism of infants was invalid.

Moreover, Christ promised His assistance to His Apostles and their successors, not only in their teaching ministry, but also in the government of the Church; not only while teaching the faithful to believe all things, but also while teaching them to "observe all things" which He commanded them. And therefore, "he that will not hear the Church sin matters of discipline as well as in matters of faith], let him be to thee as a heathen and a publican." 2 And "he that heareth you heareth me; and he that despiseth you despiseth me." And again: "Whatsoever you shall bind on earth shall be bound in heaven."4 From all these texts, it follows that the Church's supreme authority, whether vested in all the bishops together or in the Pope alone, cannot enjoin anything on the whole Church in matters of discipline which is contrary to the law of God, whether expressed positively in His commandments, or merely by the natural law. Else God would contradict Himself by ratifying in advance what would be contrary to His own law.

We do not, of course, maintain that the Church or the Pope cannot err in particular precepts regarding individuals, classes, or communities. Neither do we deny that individual bishops, or the Pope, when he does not act as the supreme pastor of all the faithful, and in virtue of his supreme power, may err. We speak only of the universal teaching and ruling body of the Church, or the Pope when speaking ex cathedra. Neither do we defend that the universal teaching and ruling Church, or the Pope ex cathedra, will always enact what is absolutely the best for the Church, for God Himself, the Supreme Ruler and Lawgiver of the universe, though He has done all things well and disposes all things wisely, neither Himself ordains, nor requires of His creatures what is absolutely the best.

The question arises whether the Church—that is, the Pope—is infallible in the canonization of the Saints, viz., whether it is infallibly true that those who are solemnly declared saints, and whose veneration is prescribed for the whole Church, are really in the enjoyment of eternal glory. There is question of the canonization, strictly so-called, not of the beatification, of the servants of God, nor of the toleration of the local cultus of certain persons who departed this life in the reputation of exalted sanctity, but of their solemn proposition by the Pope for universal veneration. Thus formulated, the query is generally answered by theologians in the affirmative; and the contrary opinion may be said to be obsolete

¹ Matt. xxviii., 20.

² Luke x., 16.

² Matt. xviii., 17.

⁴ Matt. xvi., 19; cf. xviii., 18.

in truly Catholic schools. Pope Benedict XIV. says that to deny the infallibility of the Pope in the canonization of the servants of God would be, "if not heretical, at least rash, and an occasion of scandal to the entire Church."

The reason is obvious. In the canonization of the saints the Pope declares a truth to be believed by the whole Church; namely, that such servants of God are actually in the enjoyment of everlasting glory. But the Pope cannot err in such a declaration, because he cannot impose a truth to be believed upon the whole Church on other grounds than his infallible authority; else he might invincibly lead the faithful into error. That the Pope, in the canonization of the saints, wishes to use his supreme authority and to impose the obligation of assent on the faithful is manifest from the form of words used in the bulls of canonization, and certainly it would be rash, to say the least, to assert that the Church. or the Pope, could be deceived or could mislead the faithful in a matter of such vital importance for the glory of God and the salvation of men. If the possibility of error were admitted in this case, there would be absolutely no guarantee for the purity of the Church's worship: the Church or the Pope could prescribe a false form of worship, which is contrary to the universal belief of the Church.

It is manifest that the infallibility of the Church in the canonization of the saints is not confined to those cases in which the strict canonical process prescribed by modern usage has been instituted. It extends also to those that have been universally venerated as saints in the Church before this process was introduced. For the universal Church, in its uniform teaching and practice, has the same prerogative of infallibility as the Pope or a General Council. If, therefore, a saint is found to have been venerated in the whole Church unanimously, before the end of the tenth century, when the present procedure of canonization was introduced, such must be regarded as saints no less than those canonized by this special process.

Theologians, in discussing the extent of papal infallibility, are also wont to put the question whether or not the Pope is infallible in the approbation of religious orders? All agree that the Pope could not, in virtue of his infallibility, solemnly approve for the whole Church, a religious institute, which, in itself, would be a hindrance instead of a help towards Christian perfection. But in regard to the practical question of prudence, whether the Pope or the Church could approve an order which, under the concrete circumstances of its approval, would prove injurious to the Church, there is a

¹ De Canoniz. Sanct., l. i., cap. 45.

diversity of opinion among theologians. Here, we suppose, there is not question of mere toleration, nor of partial or limited approbation for a certain province or district, but that the approval is unconditional and universal in the customary form. These conditions being verified, we say that the Pope cannot practically err in the approbation of a religious order.

For, according to the customary form, the Pope in such cases acts as the teacher, pastor and ruler of the universal Church, uses his supreme apostolic authority, and not only approves the constitutions of such religious orders as a safe guide to Christian perfection for those who choose to follow such institutes, but he also imposes on all the faithful the obligation to regard such institutes as holy, useful and salutary, not only in themselves, but also under the concrete circumstances in which they exist. Hence it is that he not unfrequently in the constitutions approving religious orders defends their institutes against hostile attacks by the severest penalties. Under such circumstances it seems rash and derogatory to the authority and infallibility of the Pope to suppose that he could be deceived himself and deceive the faithful in a matter so grave.

The case is very different if there is question of the suppression of an existing religious order. For the suppression affects the members alone and imposes no obligation on the Church at large. But the doctrinal and disciplinary infallibility is guaranteed to the Pope and to the teaching and ruling Church only in things affecting the whole Church.

I consider it needless to add that the Church, and consequently the Pope, is infallible in defining the extent of its own rights, e.g., the right to civil immunity and the right of the political independence of the Holy See. For these rights are either defined by revelation itself or are corrollaries, which naturally follow from the constitution of the Church, as outlined in Revelation. The opposite doctrine is condemned in the encyclical Quanta cura by Pius IX. "We cannot pass in silence," says the Sovereign Pontiff, "the audacity of those who, impatient of sound doctrine, maintain that assent can be denied those decisions and decrees of the Holy See, which regard the general good of the Church and its rights... without sin and without any loss of their standing as Catholics."

From the very fact, then, the Church, and also the Pope, is infallible in teaching, defining, proposing and defending the deposit of revelation, or in all those things that belong to faith and morals, it follows that it is also infallible in defining those truths and facts which are necessary for this end; and since it is infallible in the government and direction of the faithful to the end proposed to them by the Redeemer, that it must be infallible also in determin-

ing the chief means necessary for this end, that is, in disciplinary measures regarding the observance of the moral law, the divine worship, and the practice of Christian and religious perfection. Hence we concluded that the infallibility of the Church, and consequently of the Pope, extends not only to revealed truths but also to dogmatic facts, to disciplinary laws and decisions, to the canonization of the saints, and to the approbation of religious orders, and to the defence of its own rights, under the conditions and with the restrictions which we have been careful to make in the progress of this paper.

But neither the Church nor the Pope claims infallibility in the teaching of merely natural truths and sciences. They leave the scientist perfect freedom within his own sphere, and aid him by their council and direction. Therefore, the Vatican Council¹ declares: "The Church, far from being a hindrance to the cultivation of the human arts and sciences, aids and promotes it in many ways. For it does not ignore nor disregard the benefit accruing to human life from the human sciences; nay, it acknowledges, that as these proceed from God, the Lord of sciences, so, if properly treated, they lead to God with the assistance of His grace. Nor does the Church prevent such sciences, each in its sphere, to follow their own principles and their own method. But while it acknowledges this due freedom, it is solicitous that the sciences do not espouse errors which are repugnant to divine truth, or transgress their proper limits, and encroach upon and endanger the domain of faith."

IV.

It remains to consider the form under which decisions ex cathedra must be couched, in order that they may be regarded as final. And, first of all, it must be remarked that the Pope is not confined to any form in particular. When we call a definition ex cathedra, we do not imply a decision which has been given with certain formalities, but a decree or definition in which the Pope, acting as the teacher of the whole Church, imposes an obligation on all the faithful to hold a certain truth. This he may do in various ways. He has been commissioned by Christ to feed the whole flock; that is, to teach, to rule, and to govern it. Christ has prescribed no special form to him when he wishes to act in the capacity of supreme and universal teacher and ruler. The Saviour only commissioned him to feed the flock, to strengthen his brethren. He did not specify the means His vicegerent was to employ in so doing. The only restriction is, that he cannot delegate his supreme and infallible teaching authority to another,

¹ Const. de fide, c. 4.

since this prerogative is inseparably joined to the primacy, and can be exercised by no one who is not actually the successor of St. Peter. He may teach by writing or by word of mouth. He may address himself to one or to many. He may embody his teaching in the solemn form of a bull, of an allocution, or of letters apostolic; he may use the less solemn form of brief, encyclical, or epistle to an individual; or he may by special approval make his own the decrees of a provincial synod, or the decision of one of the Roman congregations.

One thing, however, is required in all cases in the form of an ex cathedra definition: it must be couched in such terms as sufficiently to express all the conditions necessary for such a pronouncement. It must be apparent from the tenor of the document that the Pope speaks as the pastor of all the faithful in the entire Christian world, in virtue of his supreme pastoral authority, with the intention of imposing an obligation of unconditional and irrevocable assent. In addition to this, of course, it must be supposed that the subjectmatter lies within the range of those objects which fall under the Church's and the Pope's teaching office; that is, it must be a revealed truth or a truth in some way necessarily connected with revelation. Yet, it must be borne in mind that the competent judge in this matter is the Church itself or the Pope, not the faithful to whom the truth is proposed; and in this judgment the Church cannot err, being the infallible custodian and dispenser of the deposit of faith. If, then, the other conditions are fulfilled, it will necessarily follow that the subject-matter of the definition is within the competence of the Church's or the Pope's teaching authority.

If these conditions are not sufficiently expressed or implied in the document itself or in its adjuncts, the presumption is that the utterance is not ex cathedra, but that the Pope, though he may act in the capacity of supreme pastor of all the faithful, and address himself to the whole Church, does not intend to give a final decision and impose an absolute obligation on the entire Church in virtue of such document. Such, we may suppose, are many papal declarations (encyclicals, letters apostolic, allocutions, etc.). They are authentic statements of doctrine or condemnation of errors, which have the highest human authority, claiming of themselves religious and internal, but not necessarily in all cases a solute, assent. Yet, in many cases, as I have said, such decisions impose absolute assent either as testifying Catholic faith, or from the subsequent consent of the entire teaching Church; and thus in either case the truth set forth in them may be absolutely binding on the whole Church, as embodying the universal belief of the judges of the faith dispersed throughout the world.

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The conditions of an ex cathedra utterance, it seems to me, are nowhere more clearly expressed than in the Bull Ineffabilis, Dec. 10, 1854, defining the dogma of the Immaculate Conception of the Blessed Virgin Mary. "In honor of the Holy and undivided Trinity, for the praise and glory of the Virgin Mother of God, for the exaltation of the Catholic faith, and the increase of the Christian religion, by the authority of our Lord Jesus Christ, and of the blessed Apostles St. Peter and St. Faul, and our own; we declare, pronounce and define the doctrine which holds that the most Blessed Virgin Mary was in the first moment of her conception, by a singular grace and privilege, in view of the merits of Jesus Christ, the Saviour of mankind, preserved from every stain of original sin, has been revealed by God, and is therefore to be firmly and constantly believed by all the faithful. Therefore, if any person should presume to think in their heart otherwise than defined by us, let them know and be henceforth convinced that, being condemned by their own judgment, they have suffered shipwreck in the faith, and have fallen away from the unity of the faith, and besides have by that very fact made themselves amenable to the penalties fixed by law, if, by word of mouth or in writing, or by other external means, they shall presume to give utterance to the sentiment of their heart."

Every condition is most prominently brought out in this definition, the Pope evidently acts as the father and teacher of all the faithful, "for the exaltation of the Catholic faith," etc. He uses his supreme apostolic authority, "the authority of our Lord Jesus Christ," etc. He imposes a strict obligation of assent upon the whole Church, proposing the dogma as a revealed truth "to be firmly and constantly believed by all the faithful."

The same conditions are clearly manifest in the famous encyclical of Pius IX., beginning with the words Quanta cura, Dec. 8, 1864, condemning certain errors of modern times. The Pope here also appeals to his "apostolic office," raises his "apostolic voice," and in virtue of his "apostolic authority, rejects, proscribes and condemns all and each of the false opinions and doctrines mentioned in these apostolic letters, and absolutely wills and commands that they be considered as proscribed and condemned."

If we compare these documents with some other doctrinal declarations of Pius IX., and of Leo XIII., we find a marked difference. While the encyclicals, allocutions and letters of these two pontiffs generally propose Catholic doctrine and condemn errors regarding faith and morals in the clearest and most unmistakable terms, and while they are doubtless meant to be a practical and authentic rule of Catholic teaching for the bishops, the schools, and the faithful at large, yet the intention of the Pope to interpose his supreme authority, and absolutely to bind the whole Church

precisely in virtue of these declarations is not sufficiently apparent in most of them, to stamp them as undoubted ex cathedra pronouncements. Yet, as I have already remarked, these documents, in many instances, are the expression of Catholic teaching; and in all cases they are practically authoritative declarations which bind in conscience not only to respectful silence, but to internal and religious assent; and most of them have been so universally and religiously received, and so assiduously inculcated by the Bishops of the whole Church, that they may now be regarded as the expressions of Catholic doctrine which no one could reject without incurring the gravest censure short of heresy. In this light, ad minimum, we must view the famous syllabus of Pius IX., and most, if not all, of the encyclicals of our gloriously reigning Pope Leo XIII.

But why leave us in suspense regarding the doctrinal value of such papal documents? Why, it has been asked, does not the Pope simply tell us in each document whether it is ex cathedra or not? Or, if a truth is definable, that is, revealed or necessarily connected with revealed doctrine, why not define it and have done with it? To this I answer, first of all, that we have not to dictate to the Holy Ghost in regard to the development and definition of the deposit of faith. Nor can the Pope, though infallible at all times, and always ready to meet doubts and controversies as they come up, impose upon himself or on his successors any definite line of action in this matter. "The Spirit breatheth where He will." According to the direction of the Spirit of Truth, who always guides and assists him, the Pope uses his supreme authority only in extraordinary cases, when the ordinary teaching office as exercised by himself and the bishops, his associate judges, is not sufficient to bring the human intellect into subjection unto the obedience of faith. supreme head of the Church exercises not only the functions of a ruler and judge in matters of faith and morals, but he also acts the part of a good father, who does not in all cases make use of the fulness of his paternal authority. When a hint or a warning is sufficient, he does not impose a precept, and when a simple precept suffices he does not have recourse to the fulness of his power, but mindful of the words of the apostle, he preaches the word in season and out of season; he reproves, entreats, rebukes in all patience and doctrine, before using his supreme authority and pronouncing the final anathema. Besides, although the Holy Ghost was given to the Church to "teach it all truth" and to "bring all things to its mind," there is no promise to the effect that the Holy Ghost would bring all truths at once and at the same time to the



¹ John, iii., 8.

consciousness of the Church or of the Pope, but as often as it will appear necessary to give a final solution to a doubt or controversy, the Holy Ghost will not be wanting to the Church and to the Pope, but will bring them to the knowledge of the truth and direct and assist them to propose it in the way that is most to the glory of God, the good of the Church, and the salvation of immortal souls.

One remark remains still to be made in regard to the form of decisions ex cathedra. Not all that is contained in an ex cathedra document is by that very fact ex cathedra teaching, and therefore infallible. The infallibility is conferred exclusively, the doctrine defined ex professo, and does not extend to preambles, arguments, obiter dicta, etc., which may be embodied in the defining document. The doctrine stated in these non-essential parts of an ex cathedra pronouncement, therefore, though they may have great theological weight, have no claim to infallibility. Let us take an example. In the Bull Ineffabilis, above referred to, the definition, which we quoted in full, is preceded by a long, learned, and accurate theological statement of the tradition of the Church on the Immaculate Conception, all of which goes to show the definableness of the dogma, but forms no part of the definition itself, and has therefore a merely theological, but no dogmatic value. Suppose that any error or inaccuracy could be found in that statement, this would, by no means, affect the definition itself. Again, if we consider the dogmatic encyclical Quanta cura, before mentioned, we find that a large portion of it is strictly defining and therefore ex cathedra, inasmuch as the Pope first reviews at length the various errors condemned and then pronounces upon them from the fulness of his authority. Now, the Pope acts infallibly not only in pronouncing sentence upon these errors, but also in formulating them, else their condemnation would be ineffectual. The infallibility must therefore extend to that large portion of the document in which the errors are summed up, though it does not extend to the preamble and to the intervening remarks.

From the preceding it will be evident to the reader that while the Pope's infallibility in its extent coincides with the infallibility of the Church itself, and while the range of subjects on which the Pope is infallible is co-extensive with the deposit of revelation and all those non-revealed truths which are necessarily connected with revelation; yet, according to the custom of the Church, directed as it is by the Holy Ghost, the Pope rarely makes use of this prerogative, except on extraordinary occasions. Ordinarily the Pope, though he may act as the pastor and teacher of all the faithful, does not intend to use his supreme apostolic authority and to impose an obligation of absolute assent upon the whole Church.

He only discharges the function of the ordinary and practical, albeit authentic and universal, pastor and teacher of the entire flock. And in this capacity also the faithful are in conscience bound to give their religious and internal assent to his teaching. He who refuses to do so is a refractory member of the flock, inasmuch as he refuses to hear the voice of the shepherd; he jeopardizes his profession as a Catholic, and places himself practically outside the fold, inasmuch as he refuses to follow the shepherd, and feeds on dangerous and forbidden pasture of his own choosing.

To such have been directed the words of Pius IX. in his letter to the Archbishop of Munich, December 21, 1863. "It is not enough," says the Sovereign pontiff, "that Catholic scholars should receive and venerate the dogmas of the Church, but it is necessary also that they submit to the doctrinal decisions of the Pontifical Congregations [how much more to the doctrinal decisions of the Pope himself?], and to those parts of doctrine which are held by the common and constant consent of Catholics as theological truths and conclusions of such certainty, that opinions opposed to them, though they may not be called heretical, yet deserve some other theological censure."

This is the infallible criterion of a true Catholic spirit, reverently and religiously to submit to the decisions of the Holy See whether they are ex cathedra, irrevocable and infallible, or simple declarations of the Pope, or of the organs through which he acts in his ordinary capacity of common pastor and teacher of the flock of Jesus Christ. Truly has it been put down by St. Ignatius of Loyola as one of the rules of orthodox thinking: "Laudare omnia præcepta Ecclesiæ, animum gerendo promptum ad quærendas rationes in eorum defensionem, et nullo modo in eorum impugnationem." 1

JAMES CONWAY, S. J.

¹ Ex spirit, Reg. ad sent, cum Eccl. 9.

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- THE best blood of England flows in my veins. On my father's side I am a Northumberland, on my mother's I am related to kings; but it avails me not!

"My name shall live in the memory of man when the titles of the Northumberlands and the Percys are extinct and forgotten."

These bitter words, and this emphatic prophecy, were written in the third decade of the present century by the founder of the Smithsonian Institution of Washington.

Louis Macie was the illegitimate son of Hugh Smithson, Duke of Northumberland, by Elizabeth Macie, the rich heiress of the Hungerfords of Studley, and niece of Charles, Duke of Somerset. He was born in 1756.

Louis changed his name, in deference to his mother, to James Smithson, when he entered upon his studies at Oxford.

The grand old Norman and Catholic race of the Percys, earls of Northumberland, has become extinct in the direct line; the name and titles were assumed, by parliamentary authority, by Sir

Hugh Smithson, Baronet, in the 17th century, whose family had been enobled by Charles II. in reward for services rendered the Stuart cause.

The Smithsons were of good old Catholic stock, and the last earl of the Percys and Northumberlands of the old faith was Hugh Smithson. He abjured the religion of his honored forefathers and died in 1729 an adherent of the Established Church, despite the prayers of his sisters, Bridget, Catharine, Dorothy and Mary Smithson, Carmelite nuns, who died in the odor of sanctity in the same convent in Flanders.¹

The earldom of Percy and Northumberland was raised to a dukedom in the English peerage, in 1776, and the descendants of Sir Hugh Smithson have since reigned over its great estates as Dukes of Northumberland.

The career of James Smithson at Oxford was a brilliant one; he graduated with the highest honors attainable.

He was reserved and studious, but he became celebrated as a scientist in the highest literary circles of London and a member of the Royal Society.

However, the stain upon his birth was ever present to his mind, and he became morbidly sensitive, perhaps unnecessarily so, to this reproach, while mingling with the accomplished and brilliant men of that period of literary life in London.

That he was the son of a duke, that he was rich, he considered, made the circumstance of his illegitimate birth all the more apparent! Of what avail was the literary renown he had won, his ducal lineage and his wealth, when he felt certain that he was indelibly marked with the stain of sin, although his private life was singularly exemplary and in contrast to that of his distinguished associates!

Brooding over such miseries, whether imaginary or real, he left London to reside in Paris; in this great centre of the arts and sciences, and among a people permeated with the consequences of the licentious periods of the Revolution and the Empire, he could live without the fear of reproach, until, perhaps, reminded of his misfortune, whenever he chanced to meet his fellow-countrymen.

His ability won him renown and literary honors in Paris; he achieved what perhaps no countryman of his had ever before achieved, he was elected vice-president of the Institute of France, an honor rarely conferred upon a foreigner, and still more rarely upon an Englishman.

Were the imperishable records of his genius insufficient to establish his claim to celebrity, this high position he had won in

¹ Sir J. Bernard Burk, English Peerage.

competition with the French savants of that period, seals his record and renown.

All honor to the memory of James Smithson!

He never married, and died in Genoa in 1829 in the 73d year of his age. He left the large fortune which came from his unfortunate mother to a bachelor nephew on the maternal side, Henry James Hungerford, providing in his will that the latter might enjoy this wealth while he lived, and at his death, the residue was to revert to the government of the United States for the purpose of founding an institution at Washington to be called the Smithsonian Institution, "for the increase and diffusion of knowledge among men."

Henry James Hungerford died in 1835, and the American government recovered through the Court of Chancery in London, in 1838, upwards of half a million of dollars, which sum was available for carrying out the intention of James Smithson, its generous donor.

But it required eight years of congressional deliberation and delay before the intended benefaction was given shape.

May 1, 1847, nearly half a century ago, the corner-stone of the Smithsonian Institution of Washington was laid.

In time the building was in part completed and opened under the management of Joseph Henry.

It is one of the few institutions in the capital of this country which has remained unpolluted by political control; it has become the centre of scientific work, and in conformity with the intention of its founder, disseminates, by its publications, "knowledge among men." Not far from the "Smithsonian," another institution of learning has been recently reared under the auspices of the Catholic hierarchy of the United States. The Catholic University has been substantially founded by the liberality of those professing the same faith, as did the progenitors of James Smithson, and both will honor the historic name of Washington.

The signs of the times we are living in, if we can judge by public sentiment in England, would seem to indicate that the system of British nobility which has so long prevailed, has lost much or its prestige; the question of the abolition of the political power of the British House of Lords, has been openly discussed. It would not be surprising to see such power withdrawn, even during the period of the present generation; should such an event occur, the titles, immunities and prestige of the nobility, would probably be abolished; the law of primogeniture and entail also, and a division of wealth among the ci-devant privileged classes ensue.

When these events shall have occurred, the prophecy of James Smithson may be fulfilled.

Among the respective schools of study in the "Smithsonian," is the Bureau of Ethnology, under the direction of Major James W. Powell.

In this bureau James Constantine Pilling, has probably accomplished one of the greatest achievements in the history of American literature.

He has compiled and edited "The Bibliography of the American Indian Races."

James Constantine Pilling was born of Roman Catholic parents, in the city of Washington, D. C., November 16th, 1846.

From the age of 10 to 13 he attended school at the Washington Seminary, since known as Gonzaga College. At 13 he attended the public schools and at 16 had gone through all the grades then existing.

Preferring to be self-supporting he refused his father's offer of a college course and sought employment in a book store. He remained in business life about five years, having in the meantime acquired a knowledge of stenography, which profession he adopted at 21, and in which he remained for six years, being engaged for the greater part of the time in work for the United States Government, with the Congressional committees, the various claims commissions, the courts, etc., when impaired eyesight caused a temporary cessation of stenographic work.

During the time he had made a special study of phonetics and became expert in the rendering of dialect speech.

In the early part of 1873 Major J. W. Powell, the chief of the United States Geological and Topographical Surveys, who had become much interested during his Western work in the study of Indian languages, invited Mr. Pilling to join his corps with a view to utilizing his services in the proper recording of this material, and since that time Mr. Pilling has been continuously connected with this branch of work.

During these years he has come into contact with the Indian peoples of Idaho, Wyoming, Utah, Colorado, Nevada, California, and those on the reservations of New York State and southern Canada.

In 1878 he began the compilation of a catalogue of authors who had written on Indian languages with a list of their manuscripts and publications, and in the course of his work visited many of the principal libraries of this country, Canada and northern Mexico.

The results of these labors were published in 1885 in a large quarto of nearly 1200 pages, entitled "Proof Sheets of a Bibliography of the Indian Languages of North America."

In July, 1879, the then existing government surveys were abol-

ished, and in their stead the present United States Geological Survey was started.

At the same time there was organized the Bureau of Ethnology of the Smithsonian Institution, and Major Powell was selected as its director, and to this organization Mr. Pilling was transferred, continuing his linguistic studies and bibliographical work. In 1881 Major Powell was appointed director of the Geological Survey and Mr. Pilling its chief clerk, both retaining, however, their connection with the Bureau of Ethnology.

The administrative work of this position was so great that but little time could be spared for ethnologic work, and hence nights and Sundays were utilized.

Ill health, brought on by overwork, as in the case of his distinguished contemporary, Doctor John Gilmary Shea, rendered a respite necessary.

Mr. Pilling fortunately took a "vacation," while Dr. Shea hastened his demise by more assiduous application to the crowning work of his life.

The summer of 1886 was spent by Mr. Pilling in Europe, when the large public and private libraries of England, France and the European capitals were visited, resulting in a great increase of bibliographical material to that contained in the "Proof Sheets."

Upon his return from Europe it was determined, upon consultation with the director, to publish this accumulated material in special bibliographies—each devoted to one linguistic family. The first, issued in 1887, was devoted to the Eskimo; and since then have appeared the publications above noted.

Exposure in the Western country, we are sorry to say, and overwork in the duties connected with the two bureaus have so impared the health of Mr. Pilling that since 1889 he has been a partial cripple.

This caused his resignation from the Geological Survey, and since that time he has devoted his energies entirely to the Bureau of Ethnology.

Mr. Pilling is a member of the Anthropological Society of Washington, Fellow of the American Association for the Advancement of Science, and the recipient of a medal from the Spanish Government for publications exhibited at the Columbian Celebration at Madrid, in 1892.

From the commencement of his researches he won the sympathetic co-operation of the bibliophiles and scholarly men, who had made collections of Americana, and he was given free access to private libraries and to the archives of American colleges and institutions.

Probably no institution of learning, no family archives, no

church, convent, or religious institution, existing on North American soil possessing prints or manuscripts relating to the Indian races, that came to his knowledge has escaped his research.

We have learned to regard these bibliographies, and more especially the Algonquian, the Iroquoian and the Siouan, as among the most valuable books of reference, in an American historical point of view, which have ever appeared; we know they are destined to become necessities upon the tables of American historical students, as much so as are the standard dictionaries of modern languages.

This, perhaps, is claiming a great deal. But we freely assert that there is much to be found in the pages of these works calculated to bring a blush upon the self-satisfied expressions of some who are wearing contemporary honors as the authors of American histories.

When hereafter the learned student may turn his attention to the study of American aboriginal history, and as he honestly seeks to explore its groundwork, that he may write impartially, he will find in Pilling such valuable indices as will prompt him to accord his memory the highest praise. In what respect are these indices so valuable?

Because they constitute a hand-book, the like of which was never before compiled in which may be found the names of all the American tribes; the names of nearly all the missionaries who sought to convert the Indian races to Christianity; the description of all books known to exist, either in the native dialects or otherwise, relating to the Indians; where published, and at what time, and where they may be found; a description of all known manuscripts in existence in the world relating to the Indian races of North America; their authors, their contents, their dates, and their custodians. These are arranged in reference to each respective bibliography, alphabetically, with chronologically arranged indexes, such as will give the languages, titles, authors, localities and dates in this order.

While the eminent compiler has, as stated, been worn by the continuous strain upon his faculties in the preparation of these great works, no recognition of his merit, so far as we have heard, has come from the American universities, either by medal or degree.

It is not creditable to the reputation of our American institutions that such is the fact, and it probably could only happen that such neglect should be found in America. Had this man done as much for history in republican France, or in other European countries, he would have been loaded with medals and covered with honorary university and institutional degrees. The many names of authors who have attempted to solve the problem of the origin of the aboriginal races of this country, given by Mr. Pilling and written in nearly all modern languages, confirms what General Cass wrote in 1829 of the futility of such attempts.

"Much labor and research," writes the general, "have been devoted to an inquiry into the origin and migration of the American Indian. Many idle notions have prevailed respecting these topics, unworthy now of serious examination except as they furnish evidence of the waywardness of the human intellect. That they are branches of the great Tartar stock is generally believed at the present day. Many points of resemblance, both physical and moral, leave little doubt upon the subject. But why, or when, or where the separation occurred, or by what route, or in what manner they were conducted from the plains of Asia to those of America it were vain to inquire and impossible to tell." 1

From the advent of the European on the soil of North America dates the decline of the aboriginal races. Victims of fate and of circumstances, their history may well excite our sympathy.

Probably few men who have written upon our Indian history were gifted with a more profound knowledge of the subject or could write with a more sympathetic pen, than Henry Rowe Schoolcraft, whose accomplished and beautiful wife was the child of an Irish father and the granddaughter of a Chippewa chief.

"Our entire Indian population," wrote Mr. Schoolcraft in 1833, "appears fated to decline; not so much, perhaps, from the want of external sympathy as from their falling under the operation of a general principle, which spares neither the white nor the red man, but inevitably dooms all who will not labor to suffering and want. Accustomed to live on game, they cannot resolutely make up their minds to become agriculturists, or shepherds, or mechanics."

They have outlived the true hunter state of the country, yet adhere with a fatal pertinacity to the maxims of a wandering life.

They pursue their intestine feuds with as determined a rancor as if they still had ample stores of animal food and unbounded ranges of territory to flee to.

They cannot be persuaded that there is any better mode of living than that pursued by their forefathers, or any state of freedom superior to that of savage independence. This is the whole mystery of their decline, however other secondary causes may have hastened and may still continue to accelerate it.

They have been taught from early life that to till the soil is dis-

¹ Historical Sketches of Michigan, p. 110.

honorable. That happiness consists in sensual enjoyments. That forecast is the distrust of Providence, the acquisition of property degrading, and generosity the test of greatness.

But their generosity often degenerates into extravagance, and their trust in Providence into an excuse for indolence. Their aversion to labor is often to be traced to the fear of ridicule. Their contempt for wealth, to the rage for pepularity. The desire for personal distinction is frequently indulged at the expense of private rights, and of national wealth. Bravery is often another term for assassination, and riot a milder word for homicide.

No one can be insensible to the heroic traits of the Indian character. To his open hospitality—his constancy in professed friendships—his filial piety—his resignation under suffering, his valor in battle, and his triumph at the stake.

No nation, perhaps, ever felt a stronger love of country, or cherished a deeper veneration for their dead; and they linger round the places of their sepulture as if conscious that the period of separation was limited, and the soul itself immortal.

There is a charm cast over the hunter's life, which is easier to appreciate than describe. There is something noble in the situation and circumstances of the Indian, who confident in his own skill, is buoyed up in his frail canoe, or trusting to his own prowess, plunges into the deepest forest, reckless alike of danger and want—roving at will, without the ties of property to embarrass, or the obligation of laws to restrain him.

But it is the charm of poetry, and not of real life; it is sweet to the contemplation, but unreal. The pleasure arises from associations, which few will stop to analyse, but which every heart can feel; it is a pleasure which will remain, and be cherished as a species of intellectual talisman, long after the people, who are the sources of it, shall have submitted to their probable fate.

To save them from that fate is an object of high and disinterested attainment—difficult to be accomplished, if we may judge from the results of all experience.

But it is a work in which we cannot err on the side of clemency and magnanimity; in which treasure may be lost, but reputation must be acquired.

Our character as a social and intellectual people has often been judged, and we may say prejudged, by our treatment of the Indians. Their condition has been referred to in terms coupled with serious charges of delinquency in the great duties which a civilized owes to an uncivilized people. Remiss we may have been in some things, and in others fallen short of the zealous expectations of philanthrophy and religion.

It was difficult, in every exigency, to reconcile the duties of selfpreservation with simultaneous efforts of improvement. But the difficulties were no sooner removed, than the efforts were renewed, and there is no period in our history as an independent nation, in which their welfare and preservation has not entered largely into our internal policy.

But in order to show how inadequate either the giving or withholding of extraneous aid has been to prevent some of the principal evils of their present condition, it is only necessary to advert to a few general facts:

In adjusting the ratio of population to the means of subsistence, it has been estimated that eight acres of land will support an agriculturalist; but it may be doubted whether the range of 8000 acres will support a hunter.

Assuming this quantity, however, to be adequate, it would require a territory equal in extent to the State of Illinois to subsist a tribe of 5000 souls." 1

Mr. Schoolcraft wrote as a friend and in sympathy with the misfortunes of the Indian races.

It is not difficult to realize from his words, that their existence on American soil, side by side with a rapidly increasing population which continues to add new States to the federal Union, is an impossibility.

But he concludes his remarks upon their situation at the time, and this it should be remembered was sixty years ago, by ascribing other causes rather than their proximity to the whites for their constant decline in numbers while living in their natural or savage state, whether on reservations or on their own domain.

"Their general declension," he remarks, "may be sought in causes more constant in their operation, or more widely spread and destructive in their effects.

"Disease has swept away more than the sword or the battle. Internal dissensions; scanty and unwholesome food; the effects of alternate abstinence and repletion; violent transitions from heat to cold—from intense and sudden exertion, to listless indolence; contempt of regimen; a reliance on mystical medicines and superstitious rites, have alternately acted as cause and effect in reducing their numbers and exasperating their condition.

"If we look closer to the constitution of the Indian mind, and his domestic habits; to his proverbial indolence and improvidence, to his blind devotion to a dark and wild belief in sorcery and magic, and the paralyzing effects of the doctrine of fatalism, we shall see other causes of his abasement; and many of these causes are totally independent of the proximity of a white population."

During the administration of Washington salutary laws were

¹ Schoolcraft, Historical Sketches of Michigan, pp 83-85.

² Reference is had to the Indian's experience while in the hunting field.—E.

enacted by Congress for the protection and welfare of the Indian tribes. When Thomas Jefferson assumed the presidential chair he saw the necessity of a general law governing Indian affairs; he was not only a deep student of their nature and peculiarities, but he was also one of the most proficient Indian philologists of his time.

The general law enacted by Congress in 1802 under his auspices, was based upon the most humane and liberal principles which could be devised for the benefit of the red man's race.

Other laws were enacted by Congress subsequently, in the same generous spirit of fairness and equity. If the history of federal legislation be closely studied from the period of the adoption of the constitution down to the present time, the same, with few exceptions, will be found to have been the governing motive in this connection.

The wrongs inflicted upon the unfortunate Indian races by subordinate officials, cannot be charged against the government, nor against its laws, but against the abuse of both by the rapacious and dishonest men in its service, who plundered like pirates and who were accountable for many of the bloody episodes which can be traced to the outrages, the robberies and the unprincipled conduct of the Indian agents of the federal government.

The first of this series of bibliographies, that of the Eskimo language, is that of a people "more widely scattered," writes Pilling in his preface to this work, "and, who, with perhaps two or three exceptions, cover a wider range of territory than those of any other of the linguistic stocks of North America." From Labrador, on the east, their habitations dot the coast line to the Aleutian Islands, on the west, and a dialect of the language is spoken on the coast of northeastern Asia.

As far north as the white man has gone remains of their deserted habitations are found, and southward they extend, on the east coast to latitude 50° and on the west coast to latitude 60°. Within this era a number of dialects are spoken, the principal of which will be found entered herein in their alphabetical order.

The earliest printed record of the languages known to me is the Greenland vocabulary in the two editions of Olearius's voyage of 1656.1

The earliest treatise on the language is found in the various editions of Hans Egede's work on "Greenland," first printed in 1729; the next by Anderson in 1746. The earliest text met with is Egede's "Four Gospels," printed at Copenhagen in 1744.²



¹ Adam Olearius was the Danish secretary of the embassy sent by the Duke of Holstein to the Grand Duke of Muscovy and Persia in 1633-9.

² Hans Egede, was a Norwegian Lutheran missionary bishop in Greenland, as was also his son Paul, who succeeded him in the same work.

The first text in the dialect of Labrador of which mention is made herein is the "Harmony of the Gospels," printed in Barbeine in 1800, the translator of which is unknown to the compiler.

Veniaminoff and Netzvietoff, in the extreme west, translated and issued a number of texts between 1840 and 1848; also a dictionary of the Aleut in 1846.

The only texts of the Eskimo of the middle stretch of country are those of the "Hudson Bay Company."

The Moravians under the patronage of Denmark, Norway, and Sweden, began missions in Greenland in the seventeenth century, and still continue their missionary work.

The second of the series of bibliographies is that of the Siouan languages; which, says the compiler in his preface, cover a wider range than those of any other linguistic group of North America, including the whole Bible, school books, periodicals, etc. Nearly every dialect is represented in print or in manuscript, either by dictionaries or extensive vocabularies, and, of five of the languages at least, somewhat pretentious grammars have been prepared.

The earliest record of Siouan languages mentioned herein is the vocabulary of Hennepin, compiled about 1680.

This work is noted as follows:

"Hennepin, Rev. (Father) Louis. Dictionary of the Dakota language. 1680. Manuscript."

"When once I had got the word Tahetchiaben, which signifies in their language, How call you this? I began soon to be able to talk of such things as are most familiar. This difficulty was hard to surmount at first, because there was no Interpreter who understood both Tongues. For example, if I had a mind to know what "to run" was in their tongue, I was forced to mend my pace, and indeed actually to run from one end of the cabin to the other, till they understood what I meant, and had told me the word which I presently sat down in my dictionary."

Father Mazzuchelli, who under the auspices of Father Gabriel Richard successfully labored in the missionary field on the shores of Lake Michigan, is credited by Pilling with being the first to publish a text in any of the Siouan languages which is noted as follows:

Mazzuchelli, Rev. Samuel. Ocangra Aramee Wawakakara, or Winnebago Prayer Book. (Three lines quotation in Winnebago.) "Waiastanoeca," 1833. George L. Whitney, Printer, Detroit. Title verse blank, one leaf, prayers, pp. 3-9. Hymns, pp. 10-14. Catechism, pp. 15-16; alphabet and numerals, p. 17; words of one syllable, etc., p. 18. 16°. The text is entirely in the Winnebago

¹ Hennepin in Siouan Bibliography, pp. 34-35.

language. This is the first publication as far as I know, of a text in any of the dialects of the Siouan family. Copies seen: Boston Athenæum.—Powell.

One of the last European editions of Father P. J. de Smet, S. J., is thus noted:

SMET, P. J. DE, Cinquanto Nouvelle Lettres due R. P. de Smet, de la Compagnie de Jésus et Missionaire en Amérique, publiées par Ed. Terwecoren, de la même Compagnie. (Two lines quotation).

Paris, Rue de Tournon, 20. Tournai Rue aux Rats, 11, H. Castelman Editeur. 1858.

Pp. i-ix, 1-503, 12°.—Lord's prayer and Ave Maria in Osage, with interlinear French translation, p. 319. Names of Sioux chiefs, translated, p. 107. Names of Sioux and Otoe delegates, translated, p. 99. Copies seen: British Museum.

Bishop Marty's baptismal card is thus noted:

Marty, Bishop Martin. Teton baptismal card. 1885. An 18° card in the Teton dialect of the Dakota language, given by Bishop Marty, to the Indians who are received into his Church.

Below the spaces for entering name, date of birth, of baptism, etc., is the Apostles' creed. On the reverse side of the card are the commandments of God and the Church, in verse, as sung by the Catholic children, with heading as follows.

"Tuwe mini akastanpi kin he wokonze kin hena opa kta iyecetu, the literal translation of which is: Who water they pour on him the that law the those follow with right." Copies seen: Powell, Shea.

The third, and not the least interesting of the series, is the Iroquoian; which embraces a wide field, and recalls the memory of one of the most brilliant periods in the history of the Catholic Church in North America.

After a critical study by the director and his colaborers, in this bureau, it was decided that the Cherokee language, belonged to the Iroquoian stock, and its literature has been incorporated in this work, of which its compiler writes in his preface: "There are in the present catalogue 949 titular entries, of which 795 relate to printed books and articles and 154 to manuscripts. Of these 856 have been seen and described by the compiler—751 of the prints and 105 of the manuscripts. Of those unseen by the writer, titles and descriptions of more than three-fourths of the former and nearly half of the latter have been received from persons who have actually seen the works and described them for him.

In addition to these, there are given 64 full titles of printed covers, second and third volumes, etc., all of which have been

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¹ Ibid., p. 50.

² Siouan Bibliography, p. 70.

seen and described by the compiler; while in the notes mention is made of 134 printed works, 90 of which have been seen and 44 derived from other (mostly printed) sources.

The languages most largely represented in these pages are the Mohawk and Cherokee, more material having been published in these two than in all the others combined.

Of manuscripts mention is made of a greater number in Mohawk than in any other of the languages.

Of grammars, we have printed in Cherokee that of Gabelentz and the unfinished one by Pickering; in Mohawk, Cuoq's "Études Philologiques" and his "Jugement erroné," and in manuscript, the rather extensive treatise by Marcoux; in Huron, that by Chaumonot, in print, and a number of manuscripts by various reverend fathers. In most of the remaining languages, also, mention is made of more or less extensive grammatic treatises, either in print or in manuscript.

In dictionaries, the more important in print are those of the Huron, by Sagard; the Mohawk by Bruyas and by Cuoq; and the Onondaga, edited by Dr. Shea. In the Seneca mention is made of one manuscript dictionary, and in the Tuscarora of two.

One of the latter, that by Mr. Hewitt, will, when finished, be, by far, the most extensive we now have knowledge of in any of the Iroquoian languages.

Of Cherokee texts in Roman characters but two will be found mentioned herein, both of them spelling-books; the one by Buttrick & Brown, printed in 1819, the other by Wofford, printed in 1824—both issued before the invention of the Cherokee syllabary.

To the Iroquoian, perhaps, belongs the honor of being the first of our American families of languages to be placed upon record—at any rate, it is the first of which we have any positive knowledge, the vocabularies appearing in the account of Cartier's second voyage to America, published at Paris in 1545, antedating all other publications touching this subject except the pseudo-" Mexican Doctrinæ Christianæ" of 1528 and 1539.

It is probable, indeed, that a printed record of some of Cartier's linguistics was made earlier than 1545.

The second voyage, in the account of which the vocabularies mentioned above appeared, was made in 1535, and the first voyage in 1534.

No copy of the first edition of the account of the first voyage is known to exist, and although we cannot fix the date of its publication, it is fair to assume that it appeared previous to the account of the second voyage. It is also fair to assume that it contained a vocabulary of the people of New France, as the first translation

of it, appearing in Ramusio's "Navigations and Voyages," in 1556, does contain such a vocabulary.

We shall give, according to priority of dates, the compiler's notes of such of the prints or manuscripts as have been given a place in the Iroquoian bibliography, beginning with that of Jacques Cartier. It is a fac-simile of the title of the "first printed account known to exist" of the languages of the Indians of North America. It is taken from the only copy known to exist, which is in the British Museum.

"BRIEF RECIT, & succincte narration, de la nauigation faicte es yfles de Canada, Hochelage & Saugenay & autres, auec particulieres meurs, language, & cerimonies des habitans d'icelles: fort delectable a veoir.

(Emblematic device.)
Auec priuilege,
On les uend à Paris au second
pillier en le grand falle du palais,
et en le rue neusue nostredame
à l'enseigne de lescu de frace, par
Ponce Rosset dict faucheur, &
Anthoine le Clerc-srores,

4545.

Title verso "A Monseignor le preuost de Paris," etc. I leas. Av Roy tres Chrestien. 4 leaves (Aii, Aiii, Aiii), the sourth with no signature number; the first leas is not numbered, the others 3, 3, 5); text leaves, 5-48 (leas 6 is misnumbered 7, which number is duplicated on the proper leas). 16°. Ensuyt le lagage (Huron) des pays & Royaulmes de Hochelaga & Canada, aultrement appelles par nous la nouuelle France. Verso of leas 46 to verso of leas 48 contains: Premier leur nombre de compter; verso leas 46: Ensuyt les noms des parties du corps de l'hôme; leaves 46 (verso)—48 verso.

The compiler remarks: "The first edition of Cartier's 'Relations,' 1545, has been so rare that but a single copy has been known to exist for nearly 300 years."

Notes follow of 14 other editions of the same work in European languages.

In 1609 Marc L'Escarbot published "A Paris chez Jean Milot, tenant sa boutique sur les degrez de la grand salle du Palais. Avec priuilege dv Roy: Histoire de la Novvelle France, etc," which is described, containing Huron numerals, vocabulary, etc.

¹ Bibliography of the Iroquoian Languages; preface, pp. iv.-vi.

It is a rare book, costing 1200 francs. Copies seen: British Museum, Brown-Lennox. 888 pp. 16°.

In 1630, "Doctrine Chrestienne du Rev Pere Ledesme, S. J." was translated into the Huron language by Father Jean de Brebaeuf, S. J.—"Pour la Conuersion des habitans Canadois." A Rouen chez Richard l'Allement pres le College." Pp. 1-26. 16.

The compiler describes 5 later editions of the same work, all intended for the Huron mission, with the fathers' subsequent works, 1627, 1640.

The Recollect brother, Sagard, is noted as follows:

"Sagard, Frère Gabriel."—Theodat.

"Le grand voyage dv pays des Hurons, situé en L'Amerique uers la mer douce ez dernieres confins de la nouvelle France. Ou il est traicte de tout es qui est du pays & du gouvernement des sauvages. Auec un dictionnaire de la langue huronne. Par Fr. Gabriel Sagard, Recollect de la Province St Denis.

"A Paris chez Deny's Moreav rue St Iacques a 'La Salamandre 1632."

Nearly a column follows of the author's description of the work. "Copies seen: Astor, British Museum, Brown-Harvard, Lennox, Shea." Brother Sagard is still further noted in 6 later editions, translations and reprints.

A liberal notice is given of the work in the Dutch language published in Amsterdam in 1644, of Dominie Megopolensis, the Dutch pastor of Albany, which contains some Mohawk phrases.

These with other notices, are embraced in the period of the Huron Missions, including the Jesuit Relations of the time.

The period of the Iroquoian Missions is rich in manuscripts.

A note of Father Jacques Bruyas's linguistic work in manuscript of the Mohawk dialect is as follows:

"Bruyas, Rev. Jacques. Radices verborum Iroquoerum Auctore
Rev. P. Jacobo Bruyas, Societatis Jesu.
Neo-Eboraci. Typis John Gilmary Shea 1863.
Second title. Radical words of the Mohawk language with their derivatives.
By Rev. James Bruyas, S. J. Missionary on the Mohawk. New York: Cramoisy Press, 1862."

"The present volume," writes Dr. Shea, "was written evidently in the latter part of the seventeenth century, and most probably on the banks of the Mohawk. It is a closely-written manuscript of 116 pages which has long been preserved in the Mission House at Caughnawaga, or Sault St. Louis, near Montreal, adding to the interest of the room where Charlevoix and Lafitau wrote." Dr. Shea then described the nature and scope of the work.

"The description of the New Netherlands," with some account

of the Iroquoian dialects, published at Amsterdam, 1655, in the Dutch language, with two fac-similes of title pages and extensive descriptive notes have been given by the compiler.

Full descriptions are given of Father Chaumonot's linguistic manuscripts, of a number of French and Huron dictionaries, grammars, devotional works, and other manuscripts designed for the use of missionaries, all of which were written in the seventeenth century and are preserved in the archives of Canadian churches, missions and colleges.

The most precious collections of authentic manuscripts of this century having reference to the evangelization of the Iroquoian races, to their language and to historic events of the times, are to be found at Caughnawaga, in the archives of the Archbishopric of Quebec; of the Laval University; of the Church at Oka Lake of the Two Mountains; but probably the most valuable authentic, as well as official of the Jesuit fathers, are in the archives of St. Mary's College, Montreal, which were exhibited and explained to us recently by Father Alfred E. Jones, S. J., archivist of this college, who is engaged in writing a history of his order in North America during the old régime, which we hope will soon be published.

The opening period of the eighteenth century in this series, is marked by a very liberal space devoted to precise and extended notices of the Baron de La Hontan's voyages and books, which cover nearly seven pages. "Truth and fiction," according to Appleton's "Cyclopædia of American Biography," "are so blended in his works they have long since ceased to have any authority."

After the last of the Jesuit Missions in the Iroquoian cantons had been broken up by the intrigues of the English colonial governors, a crusade for the conversion to the Church of England of the Iroquoian people of the league, was organized in London by the Society for the Propagation of the Gospel in Foreign Parts, and several English missionaries were sent to the field of operations. About all that remains of this crusade is offered by the compiler in two fac-similes of title pages, the one in English and the other in the Mohawk dialect entitled:

" Ne

Orhoengene neoni Yogaraskhagh Yondereanaydagh kwa,

N. E. Ene Niyoh Raodeweyena, Onoghfadogeghtige yondader-

ighwanondoentha

Siyagonnogh-fode. Enyonderecanay-Endagh-kwagge.

Yotkade capilel hogough ne Karighwadaghk weah Agayea neoni ale Testament, neoni Niyadegariwagge, ne Kanninggahaga Siniyewenoteagh. Printed by William Bradford, in New York

Digitized by Google

This work is by "Lawrence Claesse, interpreter to William Andrews, missionary to the Indians." The title page has an English translation on the left as has also the text, which is minutely described, with two columns of fine printed detail and memoir. It is a small quarto of 115 pages, and was seen in the British Museum and in New York; a fine old half-calf gilt; a "tall" copy brought \$112.

A notice of Father Etiénne de Carheil, who was at Michilimacinac early in the eighteenth century, by Dr. Shea, in his "Missions" is quoted as follows:

"Father Stephen de Carheil born at Rennes Nov. 10, 1633, arrived at Quebec on the 6th of August 1666, and was immediately placed with the Hurons, who gave him the name of Aondechété. After his expulsion from Cayuga (during the Iroquoian missions) he was sent to the Ottawa mission and labored there for many years. As a philologist he was remarkable. He spoke Huron and Cayuga with the greatest elegance and he composed valuable works in and upon both, some of which are still extant.

"Returning to Quebec, he died there in July 1726."

The works of Father Lafitau which is probably among the authorities most frequently cited, is noted as follows:

"Lafitau, Père Joseph Francois-Moeurs des sauvages Americains, comparé des premiérs temps.

"Par la Pere Lafitau de la Compagnie de Jésus. Ouvrage enrichi de figures entaille-douce. Tome 1-2 (Design.) A Paris chez Saugrain l'ainé, Quay des Augustins, près la rue Pareé, à la Fleur de Lys.

"Charles Estienne Hochereau, à la entré du Quay des Augustins, a la descente du Pont S. Michel au Phœnix, 1724. Avec approbation et privelége du Roy. 2 vols. 1 leaf. pp. 1-610. 1 leaf; 6 p. 1-400-table 20 leaves 4°.

"De la Langue (vol. 2, pp. 458-490) is a general discussion on ancient languages as compared with the modern, treating of American languages, and the Huron particularly." Copies seen: Astor, Boston Athenæum, British Museum, etc. A later edition in French and one in Dutch is noted.

Charlevoix is thus noted:

"Pierre François Xavier de, Histoire et description générale de la Nouvelle France, avec la journal historique d'un voyage fait par ordre du Roy dans l'Amérique Septentrionale. Par le Rev. P. de Charlevoix, de la Compagnie de Jésus. Tome premier-troisième. À Paris. Chez Nyon Fils, Libraire, Quai des Augustins, à l'Occasion. 1744. Avec privilége et approbation du Roy."

Then follows a critical description of the three volumes, and in what libraries they had been seen. Other works of Father de Charlevoix are also described in a similar manner.

Cadwallader Colden's history of the Five Nations follows, with descriptive notes of the original edition, printed in New York. 1727; the London editions of 1747, 1750, and 1755. The Cramoisy press reprint of the first edition, by Dr. Shea, New York, 1866, is fully described.

After the fall of Montcalm, and prior to the American Revolution, Sir William Johnson sought to evangelize the Mohawks, and introduced missionaries of the Established Church, who attempted, with the aid of others, to compile a book of Mohawk prayers, printed in New York in 1769. The revolutionary period demoralized this missionary work, as it did, in fact, the Mohawk and others of the Iroquoian league, and broke up their confederacy. Later in the century, 1790, the Moravians published in Leipzig an account of their American missionary work, and about the same time, Luigi Castiglioni published in Italian, in Milan, an edition of two volumes, giving vocabularies of the Cherokee and Choctaw dialects.

A fac-simile of the title-page is given of:

Α

Primmer for the USE of the MOHAWK CHILDREN:

To acquire the spelling and reading of their own: As well as to get acquainted with the English Tongue, which, for that purpose, is put on the opposite page.

WAERICHWAGHSAWE-IKSAONGOENWA-Tsiwaondad-derigb-honny Kaghy adoghsera; Nayonde-weyestaghk ayeweanagh nodon-a yeghyadow kaniyenhehaga Kaw-eanondaghkouh; Dyorheas-haga oni tsin hadiweanotea.

Montreal. Printed at Fleury Mesplets.

This primer is minutely described. Pp. 99. The only known copy is in the British Museum, from which the fac-simile was taken. It was reprinted in London, 1786, and a description of this edition given. Among its contents described in the text, are: "Questions and answers, from an old manuscript of the first missionaries to the Mohawk Indians, never printed before in Mohawk; a morning and an evening prayer." The work is evidently of Protestant origin. It is scarce; the English edition having been sold in New York for \$40.

In the closing years of the eighteenth century, appeared the editions of William Bartram's travels, and description of the Indians in North and South Carolina, Georgia, east and west Florida,

the Cherokee country, the Creek confederacy, and the country of the Choctaws; in fact, all that part of the United States which comprised the several fields of the Spanish missions during the sixteenth century in the Southern States. Printed in Philadelphia in 1791. Seven later editions of the same work, Philadelphia, Dublin, London, and Paris, are described and fully noted.

Turning from the printed works of the eighteenth century, we shall notice some of the precious manuscripts of that epoch which the compiler has carefully noted. We have stated that the archives of the church at Oka, Lake of the Two Mountains, in the archiocese of Montreal, is rich in manuscripts. For nearly a century Oka has been the centre of an Indian population composed of Christian Iroquois and Algonquins.

The Sulpitian Father, Jean Claude Mathevet, who was missionary at Oka for thirty-five years, 1746–1781, has left a series of manuscript sermons in the Mohawk language, a list of which was furnished the compiler by Father Leclaire, who had been stationed at Oka, and by Mrs. Erminnie A. Smith. There are upwards of fifty in the vernacular; the reading of the titles alone is edifying; besides these, several manuscript works of considerable value written by Father Mathevet have disappeared from the archives. Fifty sermons in the Mohawk dialect, all carefully written and legible, tells of the zeal and linguistic ability of this holy priest. The title of one of these Mohawk sermons, as given in French, is Femme n'aller pas à Montreal. This was probably written at the time when this city, after the conquest, was what might be termed a garrison town.

Probably the most perfect and beautifully written manuscripts, which, after the lapse of nearly one hundred and fifty years, are clear and distinct, written by Catholic priests during the eighteenth century, are those of Father Pierre Potier, S. J., last of the Huron missionaries, who died at the old mission-house of the Jesuits, the centre of the Huron mission, on the Canadian shore, opposite the city of Detroit, in 1761. This house, built in 1738 and enlarged in 1748, is still standing. Dr. Shea said of Father Potier's manuscripts, that they "were written in an almost microscopic hand." They appear on the page more sightly than the prints of the period in which they were written, and although the paper has become yellow by time the ink has remained black.

"Potier, Père Pierre. Grammar of the Huron language. Manuscript; no title-page; contents, I leaf; text, pp. 1-213, 12°."

The hand-writing is admirable, small and compact, and perfectly legible, and the manuscript, bound in leather, is well preserved.

The author has written his rules and notes in Latin, while the

equivalents of the Mohawk examples usually appear in French, though occasionally in Latin. On page 1 appears the heading "Elementa graminaticæ huronicæ," and the principal divisions of the work are as follows: Index rerum, prel. 1. De litteris, pp. 1-2. De verbus, pp. 2-62. De syntax, pp. 63-65. De adverbiis, pp. 67-75. De præpositionibus, pp. 76-78. Pronomina, etc., pp. 79-81. Quaedam adverbia, pp. 82-98. Pp. 99-102 are blank. Quædam substantiva, pp. 103-171. Pages 172-174 are blank.

Miscellanea, consisting of: Partes hominis, Parenté, Animaux, etc., pp. 175–194. Census of the Village Huron de L'isle aux boisblanc en 1747, and of other villages and bands, pp. 195–201. Pages 202–208 are blank.

Varia, consisting of: Nations sauvages, Nations policées, Places aux Français, Places Aux Anglais, Rivières, Pointes, etc., 209-213.

Father Potier wrote duplicate copies of this grammar. The duplicate of the copy described was shown to us by Father Alfred E. Jones, S. J., archivist of St. Mary's College, Montreal, in whose archives are other precious Potier manuscripts.

One in particular is exceedingly interesting, being a species of daily journal, wanting some leaves, which were cut out after the episode of Pontiac's siege of Detroit on account of their compromising contents, for the good father was on the most intimate terms with Meloche and other Frenchmen, who were fast friends of the Ottawa ruler. The Jesuit fathers refuse to have this manuscript copied or translated on account of several droll and witty allusions made in his diary by Father Potier at the expense of the Bishop of Ouebec.²

¹ The manuscript above described by Mr. Pilling belonged to the late James V. Campbell, of Detroit, Chief Justice of the Supreme Court of Michigan. It had been in his possession for a quarter of a century, and it was dearly prized by the judge, not only on account of its chirographical beauty, its minuteness and accuracy, but also on account of its historical interest in connection with the French history of Detroit, for it was written at the Huron Mission, directly opposite Detroit. Under pretence that he wanted to copy some portion of the manuscript, a certain party who had been employed by Mr. Douglas Brimner, Archivist of the Dominion Government at Ottawa, to take copies of the parochial registers at Mackinac and Sandwich, obtained the precious relic from Judge Campbell, but he never returned it; and although great efforts were made to ascertain its whereabouts, it could never be traced; meantime, the party mentioned died. It was he who loaned it to Mr. Pilling. But to whom he sold the manuscript is still a mystery. Should these lines ever be read by the possessor of Father Potier's Huron grammar, he is entreated to return it to Detroit, where it belongs, and he will be thankfully reimbursed for any outlay he may have made, innocently, when purchasing it.

² For an account of Father Potier, see the translation of Livre des Comptes de la Mission des Hurons du Detroit, 1733-1751, by the writer, the first part of which has been published in the United States Catholic Historical Magazine, April, 1892. This is one of the most valuable, interesting, and beautiful of the Jesuits' manuscripts of the eighteenth century in existence.

Probably no more valuable collateral evidence could be produced attesting the zeal, the piety, and the learning of the Catholic priesthood, both secular and regular, who during the eighteenth century were in charge of established missions, and serving the spiritual care and instruction of North American Indian tribes, than the manuscripts preserved in the religious and educational institutional archives of the Dominion of Canada.

In the archives of the church at Caughnawaga, on the River St. Lawrence, among the precious collections there relating to the last century, may be mentioned those of Father Antoine Rinfret, comprising one hundred and thirty-two sermons in the Mohawk language, quarto in size, nicely written and well preserved, the titles or subjects of each of which are minutely described by the compiler. This was a work accomplished during the sacerdotal lifetime of this priest, who, from his ordination in 1781, was pastor of the Indian congregations at Caughnawaga, St. Regis, and Lachine.

After the close of the War of 1812, all through the present century and down to the present day, when the work of a missionary among the Indians had ceased to be perilous and was unattended with the privations which were experienced during the previous century, a great number of printed books in the Indian tongues embraced in the Iroquoian bibliography have appeared. Very many of these have been printed by denominational, bible, tract, and missionary societies both in America and in Europe.

Among prominent works meriting notice are those of Father Joseph Marcoux, who, from the time of his ordination at Quebec, in 1813, until 1819, was missionary to the Mohawks at St. Regis, and from the latter date at Caughnawaga until his death in May, 1855. The compiler describes these works, the first of which, in the Mohawk tongue, was published by Lane & Bowman in Montreal, 1886. It is a prayer-book entirely in the Mohawk language. This book was dedicated to Chateaubriand, and copies of it are exceedingly rare, the compiler having the copy above described. Ten later printed books of a devotional nature are described in the Mohawk language and several valuable manuscripts, which are in the archives of Caughnawaga and Oka.

Dr. Shea has been a distinguished contributor to the material of the Iroquoian bibliography directly and incidentally in his historical and missionary works, and so has Dr. Edmund Burke O'Callaghan, who edited the documentary history of New York.

Rev. John André Cuog, pastor of the church of Oka at the present time, who is not only proficient in the Iroquoian but also in the Algonquian languages, has published several devotional works in the Mohawk language, of which ten are noted and de-

scribed. "In addition to which," writes the compiler, "he has composed an equal or greater number in the Nipissing dialect of the Algonkin. His modesty has prevented me from carrying out my desire to give a somewhat extended notice of him and his work."

The "Bibliography of the Algonquian Languages," which is not only the most extensive of the series and interesting from a Catholic standpoint, will be considered in a subsequent article.

RICHARD R. ELLIOTT.

THE AGE OF THE HUMAN RACE ACCORDING TO MODERN SCIENCE AND BIBLICAL CHRONOLOGY.

PART III.

THE ANTIQUITY OF MAN ACCORDING TO PREHISTORIC ARCHÆOLOGY.

BUT the argument of all others in favor of man's great antiquity is that founded on the gradual and peculiar evolution of the industrial arts, the conclusiveness of which argument most archæologists consider as now beyond dispute. During the last few decades especially, this argument has had a special interest attached to it, and a new force given it, on account of the numerous and important finds made not only in Europe but also in America: Various objects of human industry, of ancient but uncertain date, tools, weapons and implements of divers kinds employed by primitive man, have been unearthed and compared, and the result arrived at, we are informed, has been that the teachings of history and the Bible anent the age of our species, have to be either greatly modified or altogether abandoned.

We saw in the beginning of this paper that Hesiod, together with the majority of the earlier Greek and Oriental writers regarded mankind as having descended from a higher to a lower plane, that the men of the later periods of the world's history were degraded or decivilized, to use a more expressive word, in comparison with those who lived happy and God-like lives in the Golden Age of humanity's first beginnings.

Arehæologists divide the first period of human history into

three ages, called in the order of succession, the Stone Age, the Bronze Age, and the Iron Age. These ages have, by certain writers been divided into a greater or less number of sub-ages, but we shall here retain the division just given, which was the one adopted by Danish archæologists when the foundations of the science of prehistoric archæology were first laid.¹

If the evolution theory of the origin of man and of the development of civilization be true, we should expect to find the archæological division universally true and apply equally to all peoples in all parts of the world. But is this a fact? An answer to this question necessarily precedes a reply to the query regarding the antiquity of the human species.

There does not seem to be any doubt that in certain parts of Europe, perhaps throughout the greater portion of it, the Stone Age preceded the Ages of Bronze and Iron. The reason for this belief is that the earliest implements met with are invariably of stone, at first rough and rude, but at a later date, often beautifully polished and of delicate workmanship. With these are also found implements of horn and bone, which, in lieu of metal, constituted for primitive man the chief if not the sole materials available for the manufacture of the simple tools and weapons necessary for purposes of defence or for hunting beasts of the chase. In localities marked by several successive civilizations we frequently, but not always, find a series of deposits, the lowest of which contain only stone implements, those immediately above bronze, while the last in the order of time are characterized by the occurrence, in greater or less numbers, of implements of iron.

It would be a mistake, however, to imagine that the Stone Age marks a fixed period in human history, and that it prevailed at the same time in all lands and among all peoples. Nothing could be farther from the truth. While one nation, or one tribe was living in the Age of Stone, its next neighbor may have been enjoying the advantages of the Age of Bronze or of Iron. Even now in all the effulgence of the much-vaunted civilization of the nineteenth century the Stone Age still continues in some parts of the world. To give only a few instances, it still persists in some

¹ The division of primitive time into periods of stone, bronze and iron, although brought into general use by the Danish archæologists, notably E. C. Thomsen, is not of modern origin. It occurs in a book written by one Gognet nearly a century and a half ago. More than this; the same division is found in the *De Rerum Natura* of the Roman poet Lucretius. His words are:

[&]quot;Arma antiqua manus, ungues dentesque fuerunt Et lapides. . . . Posterius ferri vis est ærisque recepta, Et prior æris erat quam ferri cognitus usus, Quo facilis magis est natura et copia major."

of the islands of the South Pacific, among the Fuegians, the Esquimaux and certain other tribes of the Pacific coast of North America. Even in Europe the use of stone for implements was not abandoned until a comparatively recent period, if indeed it can even now be said to be entirely discarded. According to two archæologists of recognized authority, Lartet and Christy, weapons and tools of stone were employed by the inhabitants of western Europe until the Roman invasion, and probably until a later period. Records of undoubted authenticity tell us that flint hatchets and stone battle-axes were used from the fifth to the seventh century. At a much later epoch—about the year 920 according to Irish chronicles, stone projectiles were employed in a battle against the Danes near Limerick. Similar projectiles, we are informed, were used at the battle of Hastings in 1066. More than this, there is every reason to believe that over a century later, in 1298, stone weapons were employed by the Scottish soldiery under Wallace. In Japan the Age of Stone and Bronze lasted until the present century and in parts of China it still endures.

If there is no fixed period in time for the Stone Age, neither is there a hard and fast line of demarcation between the Age of Stone and that of Bronze, or between the Age of Bronze and that of Iron. They frequently overlap one another, and are, in many instances even quite synchronous. This is especially so in the case of the Age of polished Stone and the Age of Bronze. Indeed, to so great an extent is this true that many eminent archæologists have not hesitated to declare that implements of polished stone and bronze must be referred to one and the same Age. Thus the distinguished Dutch archæologist, M. Leemans, denies the distinction between the Age of Bronze and the Age of Stone in Holland. And M. Alexandre Bertrand, one of the most eminent of French archæologists, at the Congress of Archæologists held a few years ago at Stockholm, declared that "There was in reality no Age of Bronze in Italy and Gaul."

Again; it would be equally wide of the truth to assert, as is so often done, that all peoples passed through the three phases of civilization indicated by the Ages of Stone, Bronze and Iron. This is so far from being the case that numerous instances are citable where there are but two Ages, and sometimes even not more than one. M. Bertrand in referring to this subject does not hesitate to assert that "this absolute doctrine of the succession of three Ages, which has been proclaimed a law without exception, is, in our opinion, the opposite of the truth."

¹ Revue Archologique, p. 334, for the year 1875.

Thus some of the more barbarous tribes of the earth are still in the Stone Age and have never known any other. Again there are others, even in Europe, that have never known a Bronze Age. properly so called, but who passed directly from the Stone to the Iron Age. In some parts of the world the Ages of Stone and Bronze have been synchronous: in others those of Bronze and Iron. In still others, notably in parts of Western Asia, we have evidence of the contemporaneous use of stone, bronze and iron from time immemorial. From the fact that stone, bronze and iron implements are found together in Chaldean tombs and Assyrian ruins. and that too from the earliest dawn of the human period, archæologists of note have inferred that neither Chaldea nor Assyria ever knew the Ages of Bronze and Iron as distinct from that of Stone. M. Oppert declares that Babylonia and Assyria had neither a Bronze nor an Iron Age, while M. Chabas rejects altogether the distinction of the three Ages for Egypt. But more remarkable still, we find that in the case of the majority of the tribes of Africa, excluding the Egyptians, the only age that has ever existed is the Age of Iron. Stone has been used, and is still employed, but from the most remote period that archæology has been able to reach, iron has been in common use, while bronze has been entirely unknown. Dr. Livingston in his interesting "Narrative of an Expedition to the Zambesi and its Tributaries," informs us that no flints are found in this part of the "Dark Continent," and that there are no indications whatever of a Stone Age. So universally is iron used for tools and weapons that rude furnaces for smelting it are met with in every third or fourth village, and the metal here produced is preferred by the natives to that imported from England.1

Yet more. Not only are the distinctions based on the existence of the "Three Ages," vague and misleading; not only do the Ages vary in time and place, being earlier in some countries and later in others; lasting for long and indefinite periods among some peoples, and being among others of short duration, but there is also a more important fact to be noted, one indeed, that is entirely subversive of the evolution theory of primitive man.

According to the brilliant reseaches of Dr. Schliemann at Hissarlik, the site of ancient Troy, and at Mycenæ, there was neither a Stone Age nor a Metal Age in Greece and Asia Minor. More than this; the arguments that the evolution school of archæology has based on the development of civilization, as attested by the alleged gradual transition from the use of stone to that of bronze and from bronze to iron, is here decidedly negatived. In the finds at Troy especially, there is the most striking evidence of devolu-

¹ Pp. 561 et seq.

tion, or degeneration of the inhabitants who successively occupied this historic spot. Here, as well as at Mycenæ, the ornaments and implements discovered even in the lowest strata, far from indicating a state of savagery and utter degradation, betokens one of high civilization, and of as thorough an acquaintance with the working of metals and the fictile arts as was displayed at subsequent periods. In the light of Schliemann's discoveries, not to speak of others pointing in the same direction, made in Egypt, and among the ruins of Assyria and Babylonia, bearing on the condition of primitive man in the Orient, the conclusion seems to be inevitable that Hesiod was right, and that the modern evolution school is wrong-that the history of our race is not one of development, but one of degeneration. Thus the story of the Fall as recorded in Holy Writ, is corroborated by the declarations of the newest of the sciences—which is but of yesterday—prehistoric archæology.1

The chronological system of the Scandinavian archæologists has been prolific of other errors besides those just enumerated. It has, for instance, assumed that primeval man understood the manufacture and use of bronze before he had learned the art of smelting iron. In the opinion, however, of the most expert metallurgists this view is so impossible that it borders on the absurd. Thus Mr. John Percy, one of the ablest metallurgists of the age, declares that from the point of view of metallurgy the Age of Bronze should precede that of Iron. "When archæologists," he tells us, " maintain the contrary, they should remember that iron by its very nature cannot be preserved in the earth so long as bronze." Col. Tschering, a Dane, as the result of long experience in the manufacture of ordnance, stated emphatically at a recent Archæological Congress at Copenhagen, that a knowledge of iron should date back much further than that of bronze, for the reason that the latter is much more difficult to prepare than the former, and requires the employment of iron or steel tools. "So undoubted is this fact," declares Hostmann in his criticism of the "three age theory," "that it would involve a contradiction of all our technical knowledge to admit that objects of bronze have been fabricated by means of bronze tools. Such teaching is the disgrace of contemporary archæology." 2

¹ It is well to state here, once for all, that the word prehistoric does not have the absolute signification so often attributed to it by certain archæologists. It refers to that which is anterior only to local history, and not that which is prior to all history. Everything in America is prehistoric that antedates the discovery of the country by Europeans. It is evident, therefore, that certain objects found in one part of the world may be classed as prehistoric, while similar objects in other countries would be regarded as historic.

² Quoted in the Revue des Questions Scientifiques, p. 256, July, 1880.

The bronze used in Europe in prehistoric times and even much of that which was used in historic times was an imported product. It was undoubtedly brought by the Phœnicians, the great manufacturing and trading nation of the ancient world, and given in exchange for other articles of commerce. So well attested is this fact that it cannot, we think, be disputed. The use of bronze, therefore, in parts of northern and western Europe, prior to the use of iron in these same portions of the world, does not, then, as many have erroneously imagined, prove that man acquired the art of working bronze sooner than he did that of producing iron, but simply that with the Phœnicians bronze wares were more common articles of merchandise than those of iron.

As to the time that has elapsed since the beginning and the close of Stone, Bronze and Iron Ages, it may readily be surmised that the most diverse and extravagant views have obtained. Of these we shall have nothing to say, but shall confine ourselves to a brief consideration of facts that are known to be authentic and to conclusions that may be accepted as most probable.

The Age of Iron, even according to those who claim a great antiquity for our race, was posterior to the alleged Age of Bronze. But when in European countries was the Age of Bronze ushered in, and when did it close? A satisfactory answer to this question is of paramount importance, because it is the pivot on which turns much of the controversy regarding the antiquity of man.

What has just been stated regarding the bronze traffic of Phœnician traders, together with what history tells us concerning the mining for tin by the Phœnicians in the Cassiterides and possibly also in Spain, supplies us with a key for the solution of all apparent difficulties.

The period of commercial prosperity for Phœnicia, when her ships—those famous "ships of Tarshish"—sailed all known seas, and her merchants carried on traffic with the inhabitants of the most distant lands, and even with those of far-off Scandinavia, it is thought, extended approximately from the twelfth to the fifth century before the Christian era. And this is the epoch, according to the latest and most reliable researches, during which the many objects of bronze, mostly of Phœnician design and manufacture. there is reason to believe, were distributed over western, central and northern Europe. This would place the so-called Bronze Age in the neighborhood of 1000 years B.C. But this probably is assigning it a maximum antiquity, From observations made on alluvial deposits at the mouth of the Loire, M. Kerviler fixes the beginning of the Bronze Age at 500 B.C. The stratification of the alluvium at this point, indicates in the most remarkable way the annual rate of accretion, and furnishes the nearest approach to a

reliable geologic chronometer of anything yet discovered. For this reason and because they agree so well with the teachings of history, we may regard M. Kerviler's conclusions as approximately correct. According to the Danish archæologist, Worsaae, it did not terminate in Denmark until A.D. 200. Bertrand tells us that it prevailed in Germany until the fourth century after Christ, and in Ireland it is known to have lasted until the eighth or ninth century.

As to the Iron Age in Scandinavia, it belonged, if we are to credit two of the ablest authorities on the subject, Desor and Worsaae, to the fourth and six centuries after Christ. The Age of Iron in Gaul dates back to a much earlier period, probably to the fourth century before our era. This is about the time when the Gauls, properly so-called, crossed the Rhine and the Alps, and made themselves masters of eastern France, then occupied by the Celts. Judging from the finds in the celebrated necropolis of Hallstatt, the Iron Age began in Austria one or two centuries earlier.

The Stone Age terminated in Denmark, according to Worsaae about 500 or 600 B.C. This, however, may be questioned, because stone, as is well known, continued in use in Asia Minor until 700 B.C., and in many parts of western Europe, as we have already learned, until a much later period. As the result of an extended series of observations made on the alluvial deposits of the valley of the Saone, M. de Ferry attributes to the Stone Age and antiquity of 9000 or 10,000 years. From similar observations the distinguished French archæologist, Abbé Arcelin, obtains for the Stone Age an antiquity of from 6700 to 8000 years. These figures closely agree with those which historians assign for the beginning of the civilizations of Egypt and Mesopotamia. They are, however, in opposition to those derived from the generally accepted chronology of the Bible, unless, indeed, we admit, as it seems we may, the existence of antediluvian man in Europe, and allow further that he escaped the great cataclysm known as the Noachian Deluge.2 It seems impossible otherwise to account for the existence in Europe of the Basques and Finns, whose peculiar ethnological position separates them entirely from the Aryan or Japhetic branch of the human family. Regarding them of Adamic instead of Noachic descent, and admitting that they, as the precursors in Europe of the Celts and Gauls, escaped the devastating waters of the Flood, we have no difficulty, as we shall see in

¹ Southall's Epoch of the Mammoth, chap. xxiv.

² See the writer's article on this subject in the American Ecclesiastical Review for February, 1893.

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the sequel, in reconciling even the high figures of prehistoric archæology with those of scriptural chronology.

But the fact is, it is utterly impossible to arrive at anything even approximating exact dates for any of the three Ages. They are, as we have seen, different for different peoples. In some parts of the world we have only one Age represented, in others two, in others, still, all three. Sometimes they occur in succession; more frequently they overlap one another, very often they are synchronous. For this reason, therefore, to construct a system of chronology based on the implements of stone, bronze and iron that have been used by man in the prehistoric past is, at least in the present state of science, clearly impracticable.

What has been said of the futility of all attempts to arrive at a system of chronology based on the various objects of human industry to which we have referred, obviously applies with equal force to the skulls and other bones of primitive man that have attracted so much attention during the past few decades. can, no more than the implements of stone and bronze and iron so far discovered, be accepted as evidence of the great antiquity of the human race. Referring to the Canstatt and Neanderthall skulls, about which so much has been written, and the numerous theories based on them, Dr. Brinton, one of the most competent of American archæologists, well observes that "It should be recognized, once for all, that there is no sort of foundation for these dreams. In neither instance did the locality in which these skulls were found guarantee them any high antiquity." The same views were expressed at the meeting last August of the German Anthropological Association "by such speakers as Von Holder, Virchow, Kollman, and Fraas. Their arguments leave no room to doubt the importance of these remains."1

Of the tumuli and megalithic monuments of Europe, which have been thought to argue so great an antiquity for man, it will suffice to state here that, on closer examination, objects of bronze and relics of the Roman Period have been found in many of them. Even in the oldest of them, in those that archæologists were wont to consider as belonging to the Stone Age, iron is of frequent occurrence. Hence it is safe to affirm that most of these structures, far from having the great age so often attributed to them, postdate the Christian era, and in some instances by several centuries.

The shell-mounds or kitchen-middings that are found in various parts of America and Europe, especially on the eastern coasts of Denmark, are likewise often appealed to as evidences of the great age of our species. Since, however, objects of

^{1 &}quot;Current Notes on Anthropology," in Science for February 10, 1893.

bronze and iron, and articles of undoubted Roman workmanship have been found in many of them, most archæologists have been forced to admit for them a much more recent date, and to allow them "to be taken out of the category of the evidences for the antiquity of man."

About forty years ago special attention was directed by Dr. Keller to the Palafittes or Lake-Dwellings of Switzerland. They were at once seized upon as proof positive of the venerable antiquity of man. Prof. L. Agassiz, in referring to them, some years after their discovery, did not hesitate to assert that "Humanity is now connected with geological phenomena." Further investigation, however, disclosed, even in the oldest of the Lake-Dwellings, traces of copper and bronze, thus showing that they belonged to a recent epoch. Then, too, it was pointed out that the Roman soldiers under Trajan must have encountered pile-dwellers on the lakes of Austria or on the Danube, as they are represented on the celebrated triumphal column of Trajan in Rome. It was remembered, also, that both Herodotus and Hippocrates expressly mention lacustrine villages as existing in their day. The former tells of pile-dwellers who lived on Lake Prasias in Macedonia; the latter describes a similar settlement on the Phasis in Asia Minor. Still later and more careful researches showed conclusively that Lake-Dwellings in various parts of Europe were inhabited during the Middle Ages. In Switzerland there is incontestable evidence of their being occupied as late as the sixth century of our era. M. Chantre has proved that in France "there existed lacustrine habitations down to the Carlovingian Epoch." In the north of Europe, we are told by Prof. Virchow that they were in existence as late as the tenth or the eleventh century, whilst in Ireland, under the name of Crannoges, they are known to have been occupied as late as the sixteenth century. More than this, they are still found in various parts of the world, in equatorial Africa, in the islands of the Pacific, in Venezuela, in New Guinea, in Borneo, and elsewhere. But yet more remarkable is the fact that "the fishermen of Lake Prasias still inhabit wooden cottages over water, as in the days of Herodotus,"1

In view, then, of all these facts, we heartily endorse the words of Mr. W. H. Holmes, of the Smithsonian Institution, when he says that "The whole discussion of early man has been so surcharged with misconceptions of fact and errors of interpretation, that all is vitiated as a stream with impurities about its source. Until an exhaustive scientific study of the origin, form, genesis, and meaning of all the handiwork of man made use of in the dis-

¹ The Epoch of the Mammoth, p. 60.

cussion is completed, the discussion of man and culture is worse than useless, and speculation can lead but to embarrassment and disaster."

The great difficulty, as already intimated, experienced by scientists in arriving at accordant conclusions respecting the antiquity of our species, arises from the total lack of anything approaching a reliable natural chronometer. The most satisfactory one so far known is, as has been said, that discovered at St. Nazaire, by the French engineer, M. Kerviler. But this has been either ignored or rejected as unavailable by the new school of prehistorians, "because," as Abbé Hamard shrewdly observes, "it labors under the grave inconvenience of harmonizing too closely with the traditional chronology."2 The futile attempts to estimate time by the rate of growth of peat, or the deposition of alluvium, or the formation of stalagmites, we have already considered. Arguments based on certain lava deposits, on the rate of growth of coral reefs, or erosion of rocks, or on the former extension of glaciers over portions of Europe and America, are equally worthless. As an illustration of the utter insufficiency of any of the various methods employed by men of science in evaluating geologic time, and of the widelydifferent results to which such methods may give rise, we shall instance the chronometer to which geologists most frequently appeal, and which is regarded by the majority of them as the most reliable time-measurer which they, thus far, have at their disposal.

The chronometer in question is the well-known gorge between Niagara Falls and Queenstown. Assuming that the entire gorge from Lake Ontario to Niagara has been eroded by the gradually receding cataract; and assuming further, as all glacialists do, that the birth of the Falls dates from the retrogression of the great ice-sheet that enveloped this portion of territory during the Glacial Period, the problem is to determine the amount of time that has been required for the formation of this gorge, and to estimate the number of years that have elapsed since the close of the Ice Age at this point.

It is perfectly manifest that, if we could ascertain the rate of recession of the Falls, that the problem would become a very simple one indeed. All that would then be necessary would be to divide the length of the gorge—about seven miles—by the rate of recession per annum.

But two grave difficulties present themselves. It is not, in the first place, certain that the entire gorge is the result of post-Glacial action. On the contrary, there are many able glacialists who contend that a portion of the ravine was eroded before the Glacial

^{1 &}quot;Gravel Man and Pakeolithic Culture," etc., in Science for January 20, 1893.

² Dictionnaire Apologetique, Art. Chronometres Naturels.

Period, and that we have, as yet, no means of knowing just how much of the work has been done since the torrent of Niagara began to pour over its escarpment at Queenstown. In the second place, in spite of the numerous attempts to determine the rate of recession of the Falls, the most conflicting results have been reached, and that, too, by those who, we should think, were most competent to grapple with the problem.

According to the distinguished Swiss geologist, Desor, the rate of recession of the Falls is not more than one foot in a century. This would carry back the date when this grand chronometer was first set agoing full 3,500,000 years. Sir Charles Lyell estimated the maximum rate of erosion to be one foot per annum, and fixed the beginning of the cataract at 35,000 years ago. The English geologist, Bakewell, together with other careful observers, calculated the rate of retrogression to be two or three feet a year. Mr. C. K. Gilbert, of the United States Geological Survey, and Mr. R. S. Woodward, of Washington, as the result of very careful measurements, determined the average rate of recession to be five feet per annum. Hence, Mr. Gilbert, who is universally recognized as one of the most careful and reliable of observers, and one of the most eminent authorities in such matters, does not hesitate to declare that the "maximum length of time since the birth of the Falls, by the separation of the lakes, is only seven thousand years, and that even this small measure may need significant reduction."

An evidence of the truth of the conclusions arrived at by Gilbert and Woodward, is the remarkable manner in which they agree with the results obtained by other observers by the employment, sometimes of similar, and sometimes of different, methods of computation.

If the beginning of Niagara Falls marks, as has been assumed, the disappearance of the great ice-sheet at this point, it is but natural to infer that observations made at other cataracts in the same or nearly the same latitude would indicate, at least approximately, the same date for the close of the Glacial Period. Thus, according to Professor Winchell, the average rate of recession of the Falls of St. Anthony, since they first started at Fort Snelling, a little over eight miles below the present cataract, has been a trifle more than five and a half feet per year. This would fix the date of the birth of the falls at Fort Snelling at 7803 years. A detailed study of divers minor waterfalls and gorges in Ohio, by Professor Wright, fully sustains the calculations regarding the falls of St. Anthony and Niagara. From observations which he made, concerning the average rate at which the waters of Lake Michigan are eroding its banks and washing the sediment into deeper water,

Dr. E. Andrews, of Chicago, concludes that the lakes which date from the Glacial Period cannot have been in existence more than 7500 years. Calculations based on lakes and kettle-holes in New England and the northwest all lead to identical conclusions.

It seems, therefore, demonstrably certain that the age of the chronometers just referred to is much less than certain even eminent geologists have imagined. We hence infer, that the Ice Age, far from having the antiquity so often attributed to it, is of quite recent date. The same must then be said of man whose advent was probably synchronous with the latter portion of the reign of ice. It is, consequently, impossible for the gorges, lake-basins, and kettle-holes which we have been considering, to "have existed for the indefinite periods sometimes said to have elapsed since the glacial era, while eternity itself is scarcely long enough for the development of species, if the rate of change is no greater than is implied if man and his companions, both of the animal and vegetable kingdoms, were substantially what they now as long ago as the date often assigned to the great Ice Age."

It is because it has fancied that it has unlimited time at its disposal, that it has almost "eternity itself" to draw on, that the evolutionary school "under the influence of Darwinian prejudices" has handled time with such a strange laxity, and has talked of the millions of years that must be attributed to even the shortest of the geologic periods.

According to the uniformitarian school of geologists, the origin of life upon the earth must be referred back full 500,000,000 years. As the result of certain calculations regarding the rate of erosion of the earth's surface, and of the deposition of sedimentary rocks, the Rev. H. N. Hutchinson thinks that no less than 600,000,000 years have been required for the formation of the known stratified rocks of the earth's crust.2 To accomplish this same work, Sir Archibald Geike requires a period lasting somewhere between 73,000,000 and 680,000,000 of years. Mr. W. J. McGee, reasoning from the same premises, demands seven billions of years for this portion of the earth's duration, and twice this amount of time since for the period that has elapsed since it began its existence as a planet.4 In the first edition of his "Origin of Species," Darwin claimed 306,652,400 years for "the denudation of the world," which he informed us was "a mere trifle" in comparison with that which was requisite for the establishing of his theory. These are large figures, it is true, but they are still small beside the many "milliards of thousands of years," which Hæckel assures us have

¹ Wright's Great Ice Age in North America, chap.xx.

² Knowledge, September, 1893.

³ Nature, August 4, 1892.

American Anthropologist, October, 1892.

elapsed since man's original ancestor—the primal, self-created moneron—appeared on this globe of ours.

Unfortunately, however, for geologists and biologists who worship at the altar of Chronos, mathematicians and physicists and astronomers have interposed a strong demurrer against the assumption of such countless æons, and have shown cause why their demurrer should stand.

According to computations made long ago by Sir William Thomson, now Lord Kelvin, and based on a study of the earth's internal heat and its rate of radiation into space, the whole of geologic time must be limited within a period of 100,000,000 years. Proceeding from similar data, Professor Tait affirms that if the earth existed at all 100,000,000 years ago, it was in a fluid condition and at a white heat, and concludes that it is impossible to allow geologists "more scope for their speculations than about ten, or say, at most, 15,000,000 of years."

The distinguished French astronomer, Faye, in his profound work "Sur l'Origine du Monde," and Prof. S. Newcomb, hold substantially the same views. The latter says in reference to this subject, "If we reflect that a diminution of the solar-heat by less than one-fourth its amount would probably make our earth so cold that all the water on its surface would freeze, while an increase by much more than one-half would probably boil the water all away, it must be admitted that the balance of causes which would result in the sun radiating heat just fast enough to preserve the earth in its present state has probably not existed more than 10,000,000 years." §

Mr. George H. Darwin, Professor of Mathematics in Cambridge University, by computing the influence of tidal friction in retarding the rotation of the earth, arrives at the conclusion that 57,000,000 years ago the length of the day was less than seven hours, that the moon was only one-seventh of its present distance from the earth, whilst the time of a lunar revolution was but a trifle more than a day and a half. Such a condition of things as Ball has pointed out would suppose, if there were then any water on the earth's surface, the existence of tides 600 feet high, sweeping around the world every four hours and utterly destructive of every form of animal or vegetable life.

From a long series of careful experiments on the rock diabase in its relations to heat and pressure, Clarence King of the United States Geological Survey, computes the entire age of the earth, from the beginning of its planetary existence to be not more than

¹ Recent Advances on Physical Science.

² Chap, xiv,

⁸ Popular Astronomy, p. 511.

24,000,000 years. Accepting as true Lord Kelvin's conclusions regarding the age of the sun, as given in a recent lecture at the Royal Institution of Great Britain some years ago, Sir J. W. Dawson reduces "the whole of geological time, since the formation of the oldest Laurentian rocks," to about 6,000,000 of years, or possibly less, and concludes that the facts both of geology and astronomy beautifully "harmonize in point of time with those of the Bible history."

Another great source of error has been the disposition of geologists to build theories on trifles, and to draw conclusions from facts but partially or imperfectly observed. Thus from a few flint flakes discovered in France and Portugal, M. de Mortillet does not hesitate to deduce an argument for the existence of Tertiary man. or for that of some intelligent being who was man's predecessor, to whom he assigns an antiquity of more than a quarter of a million of years. On more careful examination, however, these flints are proven by the most eminent authorities, Virchow and Evans, among others, to have been produced by the operation of natural causes—by solar heat, or accidental percussion, for instance,—and to afford no evidence whatever of the action of man, or other intelligent being. The flint flakes, bulbs or conchoids of percussion, as they are sometimes called, on which M. de Mortillet bases his fanciful hypotheses, are numbered by hundreds of thousands. If he could demonstrate that they were fashioned by human hands, and were not the product of natural forces, he would, considering the number of specimens at his disposal, have a very strong argument indeed. This he is unable to do. There are others again who are prepared to make a profession of faith regarding the existence of Tertiary man on much slighter evidence. Two flint flakes, such as we have instanced, are offered by Boyd Dawkins as evidence of the existence of Tertiary Man in England. Credat Apelles Judaeus. A few years ago a bone was found in one of the English caves under glacial clay, and pronounced by some of the best known scientists of the day to be a human fibula, and to be therefore, a certain indication of the existence of man in pre-Glacial times. The bone was subsequently submitted to a careful examination by experts, and pronounced to be that of a bear, or in the learned phraseology of the committee it was declared to be "ursine" rather than "human," while others equally competent to diagnose the case came to the conclusion that it might be almost any bone. In like manner certain notched, or incised bones have been adduced as evidence of the existence of Miocene

¹ The American Journal of Science, January, 1893.

² Modern Science in Bible Lands, p. 175.

Man. The incisions, it was argued, were such as could be made only by instruments of human manufacture. It is now known that similar cuts are made on bones that have been gnawed by the porcupine and other animals. And yet more. Sundry sharpened sticks found in certain inter-Glacial deposits are appealed to as the handiwork of man, and as conclusive evidence of the great antiquity of the human race. But scarcely is this ingenious theory advanced when it is shown that similar sharpened sticks can be and have been fashioned by beavers.1 From a number of rudely flaked stones found in the gravel beds of Trenton, Dr. C. C. Abbott, builds up an ingenious theory regarding the existence of a race of men of peculiar culture in the Delaware valley in Glacial times, 10,000 or more years ago. Mr. Holmes makes a critical investigation of these deposits and flaked stones under exceptionally favorable circumstances, and comes to the conclusion, which we heartily endorse, that "the phenomena observed may all be accounted for as a result of the vicissitudes of aboriginal life and occupation within the last few hundred years as fully and as satisfactorily as by jumping thousands of years backward into the unknown."2

Truly while examining some of the evidence presented by geologists in favor of the antiquity of man one cannot help saying with Goethe, "The thing the most terrible to hear is the constantly reiterated assurance that geologists agree on a given point." For one who knows men, it is easy to divine what this means. Persons of vivid and bold imaginations take possession of an idea and give it all the appearance of probability. They soon have followers and disciples, and when these are somewhat numerous they are always looked upon as possessing special authority in science. Hundreds of educated men, occupied with other duties, are satisfied to leave to these adventurous explorers their chosen domain, and to give their approbation to all that does not affect them individually. This is what is called the unanimous consent of the learned.

How applicable to the fantasies and idle babble, the seethings of brain and the vibrations of nerve of some of our modern scientists are the following lines of a recent writer:

[&]quot;Oh the thoughts, the revelations of our age that lie enshrined in the caldron of man's mind;

How they seethe, how they simmer, how they swim and how they swirl, How they wriggle, how they wrestle, how they whisk and how they whirl!"

¹ Epoch of the Mammoth, pp. 407, 408.

² "Glacial Man in the Trenton Gravels," in the Journal of Geology, vol. i., 1893, p. 32.

Baumner's Kreuszeugen, i., p. 70. "Goethe als Naturforsher."

In 1857 was discovered near Düsseldorf the famous Neanderthal skull that occasioned such a flutter of excitement in the scientific world. Prof. Schaaffhausen adjudged it to be "the most ancient memorial of the early inhabitants of Europe." Prof. Fuhbrott wrote a book on it in which he declared the age of the relic to be from two hundred to three hundred thousand years. But this estimate was soon proven to be as extravagant as it was unwarranted. Dr. Mayer, of Bonn, as the result of a critical examination of the "fossil" and the locality in which it was found came to the conclusion that it was the skull of a Cossack killed in 1814!

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THE CHURCH IN HER HISTORY.

In considering the Catholic Church our thoughts revert to those mountains of Moab which rear themselves like a rampart beyond the river Jordan, and over which we have watched the sun rise slowly, and solemnly, and majestically, suggesting the idea of irresistible power and an almighty impulsive force of celestial mechanism. It is there beyond, in the land of the Midianites, that the poet and the prophet, bribed to curse but impelled to bless, poured out his words at sight of the people of God, arranged in exact and beautiful order in their camps—already an immense multitude: "How beautiful are thy tabernacles, O Jacob, and thy tents, O Israel! As woody valleys, as watered gardens near the rivers, as tabernacles which the Lord hath pitched, as cedars by the water-side."

These are the most harmonious verses in our English Bible. We may apply them to the Church, which is the body of Christians united in the same faith, in the same sacraments, and in obedience to the same pastors, but especially the Roman pontiff. The Church is always one, always visible, always infallible in faith and morals, being the pillar and ground of the truth. The Church is the house of the Living God, the city of the Great King, the kingdom of Christ spread far and wide, and teaching all nations; she is the fold of which Christ is the shepherd, the body of which Christ is

¹ Numb., xxiv., 5-6.

the head, the spouse of whom Christ is the bridegroom; she is ever subject to Him and ever faithful to Him; she is ever beloved of Him, and ever cherished by Him. The Church and Christ are joined to one another by an everlasting union. Whosoever shall gather together against her shall fall, and the nation that will not serve her shall perish. These are the chief characteristics of that divine institution which is the Holy Roman Catholic and Apostolic Church. She is on this earth, but not from this earth; she is in this world, but not of this world. Like a city set upon a mountain, all can look to her; like a light shining in a high place, all may see her. Such things have never been told of any other institution among men: "Glorious things are said of thee, O City of God." How wonderful, therefore, the Church is. How venerable, how enduring, how strong she is. How instructive and how interesting is her history. To no other history do the words of the Roman orator so well apply, who calls History "the witness of times past, the lamp of truth, the soul of memory, the messenger of antiquity, the teacher of life." Historia vero testis temporum, lux veritatis, vita memoriæ, magistra vitæ, nuntia vetustatis. Hence the learned Melchior Canus says a theologian is not worthy of the name if he is not acquainted with ecclesiastical history.³ The history of the Church seems to us, at this point of time, to have been divided into four grand epochs. These are from her establishment to the conversion of Constantine, first Christian emperor; from the conversion of Constantine to the crowning of Charlemagne; from the crowning of Charlemagne to the Protestant Reformation; from the Protestant Reformation to the great French Revolution and this present period.

Saint Paul, addressing the clergy of Ephesus, speaks of the Church of God as that "which He hath purchased with His own blood." Hence, to understand the general trend of this most extraordinary history we must figure to ourselves the closest analogy between the Church, which is the bride, and Christ, who is the bridegroom. Their lives and vicissitudes are similar: and as the life of our Lord on earth, from the stable of Bethlehem to the cross on Calvary, was one of sorrow, persecution and suffering, so, also, the state of His Church on earth, which is necessarily in opposition to the world—for, as the Apostle James writes, "Whosoever will be a friend of this world becometh an enemy to God," —must be one of perpetual warfare. At first the Church was attacked by paganism—this she overthrew; next by heretics—these she conquered; then by the barbarians—them she converted;

¹ Ps., 86, 3. ² Cic., De Oratore, l. ii., c. ix.

³ De Locis, lib., xi., c. 2. ⁴ Acts, xx., 28. ⁶ Ias., iv., 4.

finally, after a period of peace and triumph, such as came to our blessed Lord when they would take and make him king, and when they hailed his solemn entry into Jerusalem, by the great revolt, commonly called the Reformation, which contained, openly or in germ, every error, every schism, and every heresy of every period that went before. The history of the Catholic Church joins together two ages of human civilization. It is the connecting link between the ancient and the modern world. Rome was then the capital of the Pagan world and Rome is now the head of the Christian world.

In the first period of the Church's history there were ten general persecutions directed against her throughout the length and breadth of the vast Roman empire. Besides these there were continual partial persecutions in different parts of the empire, due to sudden ebullition of the masses, to caprice, cruelty, or avarice of governors and local magistrates, and to the "unjust disputations of the juris-consults." Hence, the well-known sarcastic passage in Tertullian: "If the Tiber overflow its banks; if there be a famine or a plague; if there be a cold, a dry, or a scorching season; if any public calamity overtake us, the universal cry of the populace is, 'to the lion with the Christians'—Christiani ad leonem." Although Livy says that no people were fonder of moderation in punishment than the Romans, which was true during the republic, vet, under the empire, public executions became frequent, and many new and cruel torments were introduced. The constant persecution of the Christians increased the appetite of the people for horrors, and did more than anything else, perhaps, to undermine the old fabric of chartered liberties, and reduce the world, under the tyranny of the emperor, whose will became law, and gave rise to that maxim which embodies the gravest of all offences against the rights and dignity of man: Quod placuit principi, id legis vigorem habet.1 Christianity was first made permanently criminal by a decree of the emperor Nero, A.D. 64, confirmed by an obsequious and degraded senate. Its professors were by the very fact held to be enemies of the human race, and guilty of the most heinous crime that one could commit—the crime of læsae majestatis, or, as we would now say, high treason. Their sentence was death by the sword, by beasts, by crosses, by flames, by scourging and by unusual punishments contrived on purpose. The senatus-consultum against the Christians remained unrepealed for three hundred years, although it was sometimes suspended or otherwise tempered, according to the humor of the reigning prince. Thus, all students of Church history are acquainted with the famous but

¹ See Mackenzie: Studies in Roman Law.

inconsistent answer of Trajan to Pliny, then governor of Bithynia, who had consulted him as to how he should proceed against the Christians. This emperor, about whom mediæval legend seems to have woven such a singular web of mythical virtue, answered his friend that, although Christianity was still a capital crime, persons supposed to be Christians are not to be sought for, anonymous accusations against them are not to be entertained; but if they are accused openly, and the charge is proven, they are to be punished. All who apostatized are to be forgiven. It may be curious in connection with this emperor, under whom the persecution was more general, and more blood was shed than under either Nero or Domitian, among the victims being Saint Simeon, of Jerusalem, Saint Ignatius, of Antioch, and Saint Domitilla, virgin, niece of the celebrated Flavius Clemens, to refer to that most singular and preposterous story which so stirred the ire of Melchior Canus, about Saint Gregory having liberated his soul out of hell. Dante is responsible for giving it new life:

"There the high glory of the Roman prince
Was chronicled, whose great beneficence
Moved Gregory to his great victory;
'Tis of the Emperor Trajan I am speaking;
And a poor widow at his bridle stood,
In attitude of weeping and of grief."—Purg., x, 73.

During the last and fiercest of the general persecutions, which was that of Diocletian, arches were erected and medals struck in the emperor's honor, because, as their inscriptions boasted, he had abolished the very name of Christian—Ob nomen Christianum deletum. We are reminded of what some people thought of the visible Headship of the Church three centuries ago, as in the last words of Tennyson's Queen Mary:

Lords.—God save Elizabeth, the Queen of England!

Bagenhall.—God save the Crown! the Papacy is no more.

Paget (aside).—Are we so sure of that?

It has been calculated that at least five million Christians were put to death for the faith during the first three hundred years of the Church's existence. But her followers increased in numbers after every persecution; and the great truth spoken by one of her Apologists was always exemplified: That the blood of Martyrs is the seed of Christians. We stand awe-struck at the wonderful ways of Providence, when we see in the Eternal City that the only monument bearing Diocletian's name—the stupendous ruins of his baths, in the erection of which forty thousand Christians, con-

¹ See Hettinger: Dante's Divina Commedia: Its Scope and Value, p. 212.

demned to the public works, were engaged, often cutting quickly, rudely, crosses, monograms and other Christian symbols in the warm mortar and on the bricks as they were handled-is now a Christian church and the title of a cardinal, and makes true the words of the heathen author, who, in a sense that he little imagined, described these baths, in their magnificence and pride, as Thermæ Diocletiani tam æterni quam sacrati nominis.1 Again, we see still standing at Rome, one of the most imposing and most completely preserved of all ancient Roman monuments—the triumphal arch, erected within ten years of Diocletian's death, on which the senate and people of Rome proclaim in a long and laudatory inscription that Constantine had conquered "By inspiration of the Divinity." It was the exaltation of the Holy Cross and the triumph of the Church. As doubts have been thrown on the genuineness of parts of this important inscription, whether, namely, the remarkable words, quod instinctu divinitatis, form part of the original, or are of later date, taking the place of some common heathen expression, such as Diis Faventibus or Nutu. Jovis. Opt. Max., which had been erased, Protestants, like the German Burckhardt, being ready to make a point against Constantine upon this supposition, and historians of the cynical school, like the Frenchman Ampère,2 always toning down whatever might tell in favor of Christianity, it may be of interest to examine the matter a little at length. The name of Constantine, revered by subsequent ages as that of the first Christian emperor, seems to have defended his triumphal arch from the barbarous spoliation which other monuments of ancient Rome have suffered. It was called in the Middle Ages "The It spans the ancient Via Triumphalis, and Arch of Piety." was erected, inscribed and dedicated in the year 315, after the emperor's victory over Maxentius, with all its preceding circumstances of the apparition of the Cross in the heavens, and the introduction of the Labarum as the imperial standard, and the substitution of the monogram of Christ upon the Roman ensigns.

We give the entire inscription, which is one of the earliest documents, so to say, of Church history:

Imp. caes. Fl. Constantino, Maximo.
P. F. Augusto. S. P. Q. R.
Quod. Instinctu. Divinitatis. Mentis.
Magnitudine. Cum. Exercitu. Suo.
Tam. De. Tyranno, Quam. De. Omni. Ejus.
Factione. Uno. Tempore. Justis.
Rempublicam. Ultus. Est. Armis.
Arcum. Triumphis. Insignem. Dicavit,

Έ,

¹ Piazza: Le Sacre Stazioni Romane, p. 236.

² Il parait même que ces mots on été ajoutés apès coup pour remplacer une form-

Of this we propose as a free translation:

The Senate and People of Rome
Have dedicated a Triumphal Arch
To the Emperor Cæsar Flavius Constantine Augustus
Pious. Happy. Great.
For that by Inspiration of the Divinity
Confident in his own Pre-eminence
Engaging with his Army in a just war
He at one blow avenged the State
Upon the Tyrant and all his Faction.

Our friend, the greatest living archæologist, Commendatore J. B. de Rossi, was so kind as to admit us to participate in the special examination and studies which he made of this inscription thirty years ago, and which were published in the Bullettino di Archeologia Cristiana, 1863, numbers 7, 8, and 11. He there proves, in a manner which has carried conviction to every critic, that no alteration has been made, or, indeed, was easily possible, since the words are cut upon the actual enormous blocks of the structure, five of which would have had to be removed in order to effect the change suggested by the opponents of an expression so Christian as that which we have been discussing.

Over the grand reliefs in the interior of the arch we read on one side the words, Fundatori Quietis, and on the other the words Liberatori Urbis: The Restorer of Peace: The Deliverer of the Capital. The former words seem clearly to allude to the cessation of the Christian persecutions. The conversion of Constantine was followed by a full edict of toleration, known as the famous Edict of Milan, whereby the rescripts of past emperors were revoked and abolished, and legal sanction given to Christian worship. This closes the first great epoch in the Church's history. Peace had now dawned, but it was not to last long. There must be heresies, writes St. Paul to the Corinthians, not, indeed, by God's will, but by reason of the pride of man's intellect and the perversity of his heart. Hitherto the Church's enemies had been from without, but now were come the "perils from false brethren," as the Apostle warns. Everything that the Church taught was attacked in turn by theologians, philosophers, men of science, statesmen, princes, potentates and emperors. All the great heresies were relative to the doctrine of Incarnation. Arius, who denied the divinity of Christ, was the life and soul of this hydra-headed monster of Arianism, from which was distilled the venom of so many other heresies. Appeal

ule peut-être plus explicitement païenne. Ce monument, qui célèbre le triomphe de Constantin, ne proclame donc pas encore nettement le triomphe du Christianisme,"— L'Empire Romain à Rome, ii., p. 355.

¹ I., xi., 19.

was always made to the Roman pontiff, although obedience was not always given to his decision. He judged in last resort all religious controversies. His convocation or consent, and final approbation, were necessary to render a council œcumenical. Peter, to whom was made the divine promise by Jesus Christ that His Church should be founded upon him as upon the rock which his name expressed, and against which the gates of hell should not prevail, was ever living in his successors, and Peter spoke in every dogmatic act and utterance of the Roman pontiffs. Athanasius, surnamed the Great, was the sword of Orthodoxy in the Arian struggle. He was the hero of the age, and the champion providentially raised up to defend, by his voice, his pen and his example, the divinity of our Lord. Ever in union with the far-distant Pope, this patriarch of the East, although abandoned by those he trusted most, and hunted by those who thirsted for his blood, never wavered, never compromised, never yielded, but stood like a beacon-tower amidst the angry seas. It was Athanasius against the world: "A dauntless soul erect, who smiled on death." These storms, too, passed off; but soon other clouds, full of menace, and big with coming disaster, appeared in masses on the horizon. Countless hordes of barbarians forced their way, in successive invasions, into every part of the Roman and Christian empire. Like a dreadful inundation the waters rose higher and higher, sweeping away and burying the language, the institutions, the monuments, the civilization of a thousand years, until the fairest part of the world was a desert. It is impossible for human pen to faithfully record the sorrows, the afflictions, the sufferings, the anguish, the losses, the desolation of the Christian people during these centuries of barbaric invasion: Crudelis ubique

Luctus, ubique pavor, et plurima mortis imago.

The words of the English laureate, in "Idylls of the King," describing the miserable state of Britain after the withdrawal of the Roman legions, are applicable to every country that had once been part and province of the empire:

"For many a petty king ere Arthur came
Ruled in this isle, and ever waging war
Each upon other, wasted all the land;
And still from time to time the heathen host
Swarm'd over seas, and harried what was left.
And so there grew great tracts of wilderness,
Wherein the beast was ever more and more,
But man was less and less till Arthur came."

The real Arthur, indeed, was Charlemagne, and his paladins were the captains fighting in a wider field than that of any provincial

king and knights of the Round-table. Only one thing now remained intact, although cruelly hurt by iron, fire, and flood. This was the Church, which, like the "Great Pyramid, stood unshaken amidst the ruins of a world which had passed away," The Church sent forth her bishops, her priests, her monks as missionaries. Armed only with the crucifix and the Word of God, they went out in every direction conquering and to conquer. Huns and Goths, Vandals, Visigoths and Burgundians, Lombards, Saxons, Danes and Normans, all in turn were brought to the bosom of Holy Mother Church. Never was a conquest so peaceful and so complete; never a more signal triumph of mind over matter; never a sublimer illustration of the Apostle's words to the Corinthians: "The weak things of this world hath God chosen, that He may confound the strong." No wonder that the Christian poet Prosper, of Aquitaine, tells exultingly, in exquisite Latin verse, that Rome as the seat of Peter and the capital of the world, holds in subjection, through the influence of Truth, more nations than were ever subdued by force of arms:

> Roma sedes Petri, quæ pastoralis honoris Facta caput mundo, quidquid non possidet armis Relligione tenet.

In this regeneration of the world the chief share was, of course, the work of Christian bishops, but their faithful assistants were the priests and monks. These were the instruments of the Church; and we could not better summarize the wonderful and successful mission of the Church at this period than by quoting from the author of "The Beginning of the Middle Ages: " Amid the ruins of the greatest pride and the greatest strength that the world had known, the Church alone stood erect and strong. In days when men relied only on force and violence, yet only to discover, time after time, that force alone could not give and secure power, the Church ruled by the word of persuasion, by example, by knowledge, by its higher view of life, by its obstinate hopes and visible beneficence, by its confidence in innocence, by its call to The Church had faith in itself and its mission where all other faith had broken down. It might be afflicted and troubled by the disasters of the time, but its work was never arrested by them. nor its courage abated. It still offered shelter and relief among the confusion, even after war had broken into its sanctuaries, and the sword had slaughtered its ministers; it still persisted in holding out the light from heaven, when the air was filled with storm and darkness." This epoch closed with the crowning of Charlemagne and the restoration of the Western Empire.

¹ Macaulay. ² I. Cor., i., 27. ³ P. 48, A.D., 400-8co. VOL. XVIII.—48

Nothing can be conceived more touching or more beautiful than that ceremony of the crowning of Charlemagne at Midnight Mass, on Christmas, A.D. 800, by Pope Leo III., the ninety-eighth successor of him who had entered Rome barefooted and alone, in the year 42, in the reign of the Emperor Claudius, and who had been put to an ignominious death, in the year 67, in the reign of the Emperor Nero. O, how things were changed since then. The sceptre of dominion had been wrested from the feeble hands of Romulus Augustulus, the last direct successor of Augustus. Pitiless barbarians had beaten the Imperial City to the ground. She lay helpless amidst her Seven Hills, ravaged of her children, the Niobe of nations, in unutterable woe and voiceless desolation. But the end was not yet:

"Hope was ever on her mountain, watching till the day begun Crown'd with sunlight—over darkness—from the still unrisen sun."

Christ, the Consoler, came and kissed that holy brow. The spell was broken. He took her by the hand and raised her from her trance and gave her new life, and confirmed her ancient and inalienable rights of Mother and Mistress of the World in a higher and a nobler sense than ever kings or consuls, or emperors, or bards, or poets, or historians had dreamed of in their maddest ecstacy of Urbs Æternials. The smoke of heathen sacrifices had been succeeded by the fragrance of Christian incense offered to the Clean Oblation of a New and Everlasting Testament. The Forum, which had resounded with the eloquence of Tully, was now silent. The Sacred and Victorious Way-Via Sacra, Clivus Victoriæ-over which had marched the shouting legions of Augustus was disused and broken The stupendous palace, from whose verdant terraces and gilded porticos and balconies and windows thousands had applauded the darling triumph of Germanicus, was all in ruins. visible images of Rome's earthly grandeur were gone; but there still remained the mightier influence and power of religion. And Rome was now to exercise the strongest act of authority that the world had ever seen. The long dormant Western Empire was to be revived, and at its head was to be placed a prince of that barbaric race which had destroyed the original work of Cæsar Augustus and captured and slain his successors. The place was not unworthy of the occasion. It was that glorious Constantinian basilica which had already stood for five hundred years, and whose deep foundations, hallowed in soil brought from Jerusalem, surrounded a spot called the Confession, where first had rested and now reposed the body of Saint Peter. His shrine was rich with precious stones. A hundred lamps of gold, fed with the purest olive oil, shed a dim religious light around. His altar blazed with polished marbles

and jewelled chalices and crucifixes. The pavement of this grand edifice was laid with rare and many-colored stones; the walls were decorated with superb mosaics; the aisles were divided by rows of fluted columns with corinthian capitals—the willing spoil of ancient temples; the ceiling was of cedar of Lebanon, skillfully carved and gilded. Around the Pope were ranged, in gorgeous vestments, the cardinals, bishops, and prelates of his court, and in brilliant military and civil costumes the still recognized descendants of senators, patricians, knights and consuls. Before him knelt the Frankish ruler—the one only prince in all the world in whose favor the title of Great has been indissolubly blended with the name. With one hand on his sword and the other touching the open Book of the Gospels, he swore to maintain the cause of God and the rights and privileges of Holy Church. Then was placed upon his head by the hands of the Pope a golden crown surmounted by a globe and cross, to symbolize this perfect truth that "The lion of the house of Juda hath prevailed:" Christ conquers! Christ reigns! Christ governs! Thus was set the seal of papal consecration to a government founded on revealed religion. Then was pronounced in solemn chaunt, begun by the choir, and taken up by the Pope, the clergy, the Roman nobles and people, and the chiefs and great men of the Franks, this novel acclamation: "To Charles-Pious-Augustus-Crowned of God -Great-Peace-giving Emperor-Life and Victory." This was thrice repeated, each time in a louder key. It was also loudly proclaimed that this was done "at Rome, the mother of sovereignty"; and all the successors of Charlemagne¹ in the Holy Roman and Germanic empire, which lasted over a thousand years, were bound to come to Rome to be crowned by the Pope. Thus, also, the Church put an end forever to such disquiet and agitation as, Tacitus tells us, filled all classes in the old empire after the death of

¹ Charlemagne is assuredly the greatest layman in the Church's history—one who brought to perfection what Constantine only began; and it may be interesting to note that, dying on the 28th of January, 814, he was buried in our Lady's Church of Aixla-Chapelle. His sepulchre was opened three hundred years after his death by the emperor Frederick Barbarossa, who descended after dark with fear and trembling and awful sentiments, into the dread presence of him who still appeared to hold imperial sway. Although dead, he seemed alive. His body had been carefully embalmed. He was seated erect on a solid throne of gold; his sacred emblem was on his head; a thin, transparent veil fell over his face; a purple mantle, clasped with precious stones, was gathered around him; his sword, "Joyeuse," which he had borne on so many battle fields for God and Holy Church, was hung beside him; his right hand held the golden sceptre which he had received from Leo, while his left rested on the open page of an illuminated copy of the Gospels. Thus, even in death, he was linked with the triumphs of religion. A wonderfully graphic representation of the scene has been painted in fresco by Allert Bethel, in 1870, and is a chef d'auure of the German school.

Nero, when the distant legionaries saluted Galba: evulgato imperii arcano, posse principem alibi quam Romæ fieri.

A majestic era now opened to the Church. All the grand and beneficent institutions of modern times have their beginning in these Middle Ages - these ages of Faith. Now were established those many religious Orders in which piety and learning walked hand in hand; now were founded those great Universities that still endure; now were built those heavenly Cathedrals which we cannot equal with all our science and all our wealth; now were gathered up the literary remains of classical antiquity, and carefully copied and preserved in monastic and collegiate libraries in expectation of the Art preservative of all arts-the invention of printingwhich should endow them with a species of immortality; now were composed the sublimest anthems, hymns and canticles in which song and music have become the handmaids of religion, and the human soul moved to its inmost depths—such as the Pange Lingua, the Stabat Mater, the Lauda Sion, the Dies Ira, the Veni Creator Spiritus. Let us mention, also, the Truce of God, by which bloodshed and war were minimized; the saving clause of Benefit of Clergy, by which a premium was put on learning; and, finally, those missionary expeditions, those extended travels, those adventurous navigations, those geographical studies which found the ocean-route to India and led to the wonderful discovery of America. At the beginning of the sixteenth century everything opened brightly for a long and glorious cycle of prosperity. But, alas! the calm was soon disturbed by ominous sounds; the voice of one crying in the North, "I will not serve." Martin Luther had appealed to Rome. Rome had spoken and decided against him; the case was closed. The priest would not submit, and with him began that era called Protestant, because it protested against the dogmas and traditions of the old Church, the ancient Church, the early Church, the primitive Church, the Apostolic Church. A witty controversialist once said in answer to the boastful assertion that Protestantism gave liberty to reason, that rather it gave liberty to the flesh. In fact, we could not help thinking of this and of Esdras: multi peccaverunt propter mulieres, and of Saint Justin Martyr, reproving the Greeks in the same sense: "In the 'Iliad' and the 'Odyssee'-woman! always woman! from the beginning to the end." One day when visiting the British Museum, there, in the Manuscript Department, the very first of the series of remarkable original letters shown under glass cases, we saw that famous one of Desiderius Erasmus, of Rotterdam, dated from Basel on the 24th of December, 1525, and addressed to Nicholas

¹ Hist., i., 4.

² Jer., ii , 20.

Everard, president of Holland, in which he says of Luther's marriage to the ex-nun, Catharine Bora: Solent comici tumultus ferè in matrimonium exire. . . . Similem exitum habitura videtur Lutherana tragædia. Duxit uxorem monachus monacham.—The Reformation, like all comedies, ends in marriage. We remember being struck, on our first visit to the Vatican Library, by the exquisite irony of that isolated glass-covered stand on which was a scarlet cushion, and on the cushion were two things: the original copy of Henry VIII.'s treatise against Luther, sent to Pope Leo X. in 1521, with the autograph dedication:

Anglorum rex Henricus, Leo decime, mittit Hoc opus et fidei testem et amicitiæ;

and beside it an open, adulterous letter from Anne Boleyn to the king, subscribed: "Votre loiale et plus assuré serviteure. Autre ne cherse." Then was set up that principle of private judgment so utterly subversive of scriptural interpretation, of dogmatic teaching. and of religious unity. Its logical outcome was anarchy and the great French Revolution one hundred years ago. The war goes bravely on. The Church is ready for every foe. She will subdue this latest enemy by insisting on these cardinal points, religious education and submission to lawful authority. How often have we not heard the cry, "Her long domination is at an end," But the end is not yet, nor ever will be until the Church militant on earth is transformed and sublimated into the Church triumphant in heaven. If our thoughts are pure and holy and heroic; if our lives are filled with noble deeds and spiritual aspirations, and a sense of solemn sacrifice, we shall look forward to the Church's history in the coming ages with the confidence and joy of certain victory. The future belongs to her. We, her children, are the Argonauts; we have won the golden fleece. Peace, such as this world gives, we do not expect. Christians will still have to conquer-as in the past-by dying for human liberty; for the noblest expression of human liberty is freedom of conscience, the essence of which is that questions of the soul are beyond the jurisdiction of any civil ruler. The whole history of the Catholic Church has been a struggle to enforce this precept of the Lord: "Render to Cæsar the things that are Cæsar's, and to God the things that are God's."2 If the Church had not a divine origin; if the Church were merely a human institution, she must long ago have perished. There is a sustaining divinity within her, and, after every affliction.

¹ For an interesting account of the compliment bestowed on Henry for his orthodoxy before he fell, see Bridgett: "The Defender of the Faith: the Royal Title: Its History and Value."

² Luke, xx., 25.

her youth is renewed, like the eagle's. Let us end with these lines from England's convert-poet—Dryden—which Hallam calls the most musical in the language—the opening lines of "The Hind and Panther," in which we find the energy of Bossuet in verse:

"A milk-white hind, immortal and unchang'd,
Fed on the lawns, and in the forest rang'd;
Without unspotted, innocent within,
She fear'd no danger, for she knew no sin:
Yet had she oft been chas'd with horns and hounds
And Scythian shafts, and many winged wounds
Aim'd at her heart; was often forc'd to fly,
And doom'd to death, tho' fated not to die,"

ROBERT SETON.

HARNACK'S DOGMATIC HISTORY.

Lehrbuch der Dogmengeschichte, von Dr. Adolf Harnack. Ord. Professor der Kirchengeschichte in Marburg. Zweite Verbesserte und Vermehrte Auflage. Freiburg. 1888.

Outlines of the History of Dogma. By Dr. Adolf Harnack, Professor of Church History in the University of Berlin. Translated by Edwin Knox Mitchell, M.A., Professor of Græco-Roman and Eastern Church History, in the Hartford Theological Seminary. New York: Funk and Wagnall's Company, London and Toronto, 1893.

R. HARNACK is a Lutheran Minister and Professor, who made his reputation at the University of Marburg, and has since been transferred to Berlin.

He is at the head of his school of theologians, and his lectureroom is crowded by German and foreign auditors, among whom
Catholics are sometimes found. His learning is vast, and he possesses a wonderful ingenuity in manipulating the facts and documents of history, so as to subserve his theory of the Christian religion. He is reputed to be an eloquent and fascinating lecturer,
but his style of writing is peculiar and clumsy, and his manner of
presenting his topics is often obscure and confused, so that it is
difficult to discover what his beliefs and convictions are with precision and accuracy. He is thoroughly and fundamentally anti-

Catholic, and his great work is the ablest, most complete, and most plausible existing attempt to undermine historically the foundations of the Catholic religion, and to show that it is a human substitution for the original, authentic, and divine gospel. But his criticism of primitive Christian history is also equally destructive of that which Lutherans and other Protestants of the old schools regard as orthodoxy. Catholic orthodoxy he dislikes and respects; Protestant orthodoxy he despises; and he has given expression to it in almost the only piece of bitter vituperation to be found in his history of dogma.

"The later Lutheran Church in the false standard by which it measures departures in doctrine and proclaims them heretical, threatens to become a scrawny twin of the Catholic Church." (Mitchell's Harnack, p. 567.)

We might class Dr. Harnack as a rationalist theologian were it not that he has no rational philosophy or theology. He recognizes, with Kant and Spencer, only relative knowledge. He calls himself a scientific theologian, and rejects all authority whether of the Bible or the Church. At the same time, he separates faith from science and history, and relegates it to a kind of spiritual and mystic sphere, apart from the rational, where it will not trouble him in his free speculations upon the entire domain of historical Christianity. The real actual Christianity which is an object of historical research, like Brahmanism, Buddhism, and Mohammedanism, from this point of view, is merely one form of human development, and thus, where there is freedom from dogmatic prejudice, the historic sense, and a liberal scientific spirit, they enable one to look calmly, and somewhat impartially, at things as they are, and to represent them fairly. There is a great deal of this fair and candid presentation of historical facts in Dr. Harnack's work, which gives it a considerable value for the study of ecclesiastical history. Strange as it may seem, his testimony, taken on the whole, is strongly in favor of the Catholic side as against positive Protestantism. For, dogmatic and ecclesiastical Christianity, in its earliest historical manifestation is, according to him, Catholicism. True, he attempts to show how it arose and was developed from sources extraneous to the gospel; but he places its beginnings at a date so near the Apostolic age, that it is easy to infer that the Apostles must have been its authors.

The history of the Gnostic and Marcionite heresies is especially interesting and valuable. None better can be anywhere found, so far as our knowledge extends.

The work translated by Professor Mitchell is not the larger history, in three volumes, but a compendium of the same in one. That such a work should be translated and put in circulation by a pro-

fessor in the Hartford Seminary, is a singular and ominous fact. That seminary was founded as a stronghold of the Old School theology of New England, in opposition to New Haven. It is not from New Haven, however, but from Hartford that a book is issued which is destructive of all the foundations of the system called orthodox in the seminaries of Princeton, Hartford, and even New Haven and Andover. Dr. Harnack, in his preface, says: "In reality, however, there no longer exists any distinction between German and English theological science. The exchange is now so brisk that scientific theologians of all Evangelical lands form already one concilium."

We commend this book to the careful perusal of Mr. Mitchell's fellow-professors, and the members of the "Pastoral Union." Will they recognize Dr. Harnack and his doctrines as "Evangelical?" If so, they should at once go into fellowship with the Unitarians of Cambridge, and strike the flag of orthodoxy.

The history of dogma, in Dr. Harnack's sense, is the history of the rise and development of a system of formulated definitions of doctrine, professing to be derived from divine revelation, and decreed by authority as constitutive principles of the ecclesiastical society which declares itself to be the Christian Church.

Dr. Harnack distinguishes between the Gospel, properly socalled, and the preaching of the first evangelists, and the dogmatic Christianity which arose after the transplanting of the Christian religion from Jewish to Gentile soils under the influence of Greek philosophy, and was then developed into Catholicism. He does not profess to mark precisely the periods of transition and the earliest phases of development. But, in a general way, he takes the middle of the third century as an epoch, in which the transformation has reached a stage of growth which exhibits the specific characters and features of the new religion in distinct outlines. The chief of these are a formal confession of faith expanded from the baptismal creed, a canon of New Testament Scripture, and a hierarchical order, exercising the teaching, governing, and sacerdotal offices, in a church organically one and catholic.

"If we compare the Church in the middle of the third century with the condition of Christianity 150 to 200 years earlier, we find that there is a religious community, while earlier there were only particular congregations, which believed in such a general community and strove to give it expression with the simplest means; we find the same furnished with fixed forms of every kind, not Jewish but Græco-Roman, and we recognize, finally, in the doctrine of faith on which this community is grounded the philosophical spirit of the Greeks. We find a church as a political commonwealth and institute of worship, a formulated faith, a theology; but

find no longer the old individuality and enthusiasm which did not feel itself constricted by subjection to the authority of the Old Testament. We find, instead of independent Christians filled with the spirit, a new revealed document, the New Testament, and Christian priests. When did these formations begin?" (Vol. i., p. 43.)

When, indeed? Nothing can be more logically and historically certain than that they must have begun with the Apostles and with Jesus Christ. This very singular passage amply sustains the assertion we have made above, that Dr. Harnack's testimony furnishes an irrefragable argument in favor of the Apostolic origin of Catholicism. Let its admissions be well noted.

In A.D. 250, there existed a Catholic Church, which was a "political commonwealth," i.e., an organized corporate society, "furnished with fixed forms of every kind," "grounded in a doctrine of faith," i.e., the Catholic faith was established by ecclesiastical authority; it was "a formulated faith, a theology"; there was an established ceremonial liturgy; "institute of worship"; conducted by "priests," and a received canon of inspired Scripture of the New Testament. That these were "instead of independent Christians" is a blundering and nonsensical statement. And that individuality of character and heroic virtue, generous, fervent enthusiasm for Christ and the Gospel were wanting in the period between A.D. 250 and A.D. 313, the era of the most terrible persecutions, of the most numerous martyrdoms, is a flagrant and capricious flying in the face of palpable historical facts.

The confessed reality of the condition of the Catholic Church in the middle of the third century, gives to the cause of Catholicism rightful and complete possession of the whole ground as the genuine Christian religion. It has the claim of prescription and possession, from which it cannot be ousted, except by clear and conclusive proof that a different kind of Christianity preceded it, in the interval between A.D. 30 and A.D. 250, and was transformed during that interval into this new species by some process of evolution, not a normal and legitimate development, but an essential alteration.

We have no quarrel with the idea of development in doctrine, in ritual, and in ecclesiastical organization. There must have been such a development in a living, organic body, which began in infancy and grew to adult age.

Neither do we repudiate the assimilation of Græco-Roman elements into the constitution and theology of the Church. It is one of the most striking evidences that the mission of Jesus Christ was in the same order of Divine Providence which rules the world, that He came just in time to blend Jewish tradition, Greek culture, and Roman jurisprudence into a combination of irresistible force

for the subjugation of civilized mankind, and the civilization of the outlying barbarous hordes of the Roman empire.

The contention is concerning the origin, the rise, the starting-point, the germs, of the development; the dominating force which governed the expansion and growth of the little, humanly-feeble folk of the disciples into a world-wide kingdom. Judaism, Greek philosophy, and Roman polity, were a preparation for the gospel and the kingdom of Christ, as Clement of Alexandria and Justin, in their far-seeing wisdom, perceived and proclaimed. The gospel and the kingdom which Jesus Christ personally announced, of which He made His apostles the heralds and commissioned legates, was the veritable authentic Christianity, the religion, the world-conquering power, which shows its genuine, advanced development in the third century; which was served and not dominated by all the Græco-Roman elements which it absorbed and purified.

The Christianity of Christ, the Christianity of the Apostles, the Christianity of the second, the third, and the fourth centuries; the Christianity of the scattered and persecuted flocks, hunted to death by the heathen emperors, and that of the victorious Constantine; the Christianity of the cœnaculum, and of the hall of the Nicene Council, was the same. Its soul is the Catholic Faith, its body is the Catholic Church, its author is Jesus Christ. There is no break in its unity and continuity.

This is the Catholic contention. Dr. Harnack's contention is, that there are two breaks in the continuous unity. The gospel of Christ is separate from the gospel of the first Evangelists; this, in turn, is far more widely separated from the dogmatic and ecclesiastical Christianity which is supposed to have originated among the Gentile Christians when they were imbued with Græco-Roman principles and ideas, became animated by a philosophical spirit, and directed by worldly maxims; forgetting the lessons of the Gospel, and losing the first enthusiasm of the faithful disciples of Christ. Here, then, is the principal break of continuity, creating a wide chasm between the religion of the genuine gospel and the Christianity, which from a new and different source developed early and rapidly into Catholicism, which Dr. Harnack, more than once, explicitly calls a "superstition." In the last sentences of his smaller work, the "Grundriss," he thus defines its essential, specific nature: "Catholicism is not the Pope, nor the worship of the saints, nor the mass—these are consequences—but the false doctrine of the sacraments, of penance, of faith, and of authority in matters of faith." Here, then, in "the false doctrine of faith and of authority in matters of faith," is a principal characteristic difference of Catholicism from the "gospel." "Luther," he says, "once more lifted the gospel, placed it upon the lamp-stand, and

subordinated dogma to it." He might have added: "I, Dr. Harnack, complete his work by eliminating dogma from it." For, the "Christology" of the Lutheran Church is one of the features in which he finds it to have the resemblance of a "scrawny twin" to the Catholic Church. Dr. Harnack is no more a Lutheran than he is a Catholic; no more a Bible Christian than a churchman. His one aim is, to show that there is nothing dogmatic in the original Christian religion, in the gospel of Christ; and that Christianity became dogmatic by a transmutation of species and a subsequent evolution of Catholicism, the history of which he undertakes to describe.

The theory of Dr. Harnack is directly contradictory to the Catholic doctrine of faith and authority, not only in its consistent and strictly Catholic form, but also in every imperfect semi-Catholic form of those Protestant confessions which retain the idea of supernatural revelation and a rule of faith. It denies the authority of Christ, as a revealer of divine truths—specifically of those mysteries which are the fundamental articles of the Christian creed. It denies the authority of the Apostles as the heralds of Christ; and of the Scriptures of the New Testament, not merely as inspired, but as documents of divine revelation; and a fortiori, of the Catholic Ecclesia Docens.

The one, and only important point, therefore, to be argued, is the continuity of the divine, supernatural revelation and religion, the faith, and the authority which proposes the faith in the Church, from Christ, through the Apostles to their successors; the written and the unwritten word of God, whose authentic expression and legitimate development is dogmatic Christianity.

Let us examine, now, more closely what is Dr. Harnack's idea of the person and gospel of Jesus Christ.

He does not say explicitly whether he believes Jesus Christ to have been a mere man, or more than man, to have pre-existed or not to his human birth, to be the Son of God by His very nature, or only to have gained and received a higher degree of the same filial relation to God which is the privilege of all holy persons. The account which he gives of the Christology of early periods of Church history implies, however, that he rejects, altogether, the doctrines of the Trinity, and the Incarnation, and regards Jesus Christ as a mere man, the son of Joseph and Mary, chosen by God to proclaim the message of the gospel, to exhibit in his person a perfect example of human sanctity, to draw men to the love of God by the charm of his character, and in some way to act as the representative of God, the Lord, the Redeemer, and the Judge of men. In virtue of his character and office, he was the Messiah of his people, the Master of his disciples.

The gospel which he preached was the sovereignty of God; the high and perfect righteousness consisting in a supreme love of God and the love of the fellow-men; above all legal and ceremonial observances; of religious filiation to God as Father, on condition of repentance and humble confidence; remission of sins, and a secure hope of future glory and happiness in the kingdom of God. This gospel was embodied and personified in Jesus Christ, who awakened in his disciples an intense, enthusiastic devotion to himself, which constituted the religion of the first generation of Christians.

In respect to the miracles of Jesus Christ, Dr. Harnack expresses himself in a very ambiguous manner, and at last dismisses them with the exclamation, "How unfit they are, in and of themselves, to secure to the One to whom they are ascribed, after 1800 years, any kind of special importance." (Page 59.)

In respect to the great crowning miracle of the Resurrection, Dr. Harnack presents us with a hazy, confused, and ambiguous piece of criticism, which is a remarkable specimen of the mixture of German rationalism with German mysticism. Its practical outcome and effect is to sweep away all grounds of credibility from this grand, miraculous, divine fact, the corner-stone of Christianity.

"It is an often-repeated saying, that Christianity rests on the belief in the resurrection of Christ. When this, as often happens, is enlarged into the proposition that the resurrection of Christ is the most certain fact of the history of the world, one does not know whether to wonder most over the stupidity or the unbelief of this saying. One does not need to believe in a fact, and that which needs religious faith—that is, trust in God—can never be a fact which can stand firm, prescinding from such a faith. Before all, therefore, the question of history and the question of faith must be sharply distinguished."

Historically, the following points stand firm:

- 1. That no one of the enemies of Christ saw him after death.
- 2. That disciples of Christ, soon after his death, were convinced that they had seen him.
- 3. That the succession and number of these appearances cannot be ascertained with certainty.
- 4. That the disciples and Paul were convinced that they saw him, not in the crucified earthly body, but in heavenly glory; even the later, incredible accounts of the appearances of Christ, which strongly emphasize the corporeity, speak, nevertheless, at the same time of such a body as goes through closed doors, and is, therefore, no earthly body.
- 5. That Paul, indeed, does not assimilate the manifestation of Christ granted to him with any of his subsequent visions, yet, nevertheless describes it (Gal. i., 15) in these words, "when God

was pleased to reveal his Son in me," and still places it on a level with the appearance which others before him had seen.

Now, since the discovery of the empty sepulchre on the third day can by no means pass for a sure historical fact, because, where the account is given, it is connected with manifestly mythical features; and furthermore, because the way in which Paul (1 Cor. xv.) has described the resurrection directly excludes it; therefore, the conclusion follows, I, that the notion here presented is remote from the original apprehension of the resurrection of Christ as a simple revivication of his mortal body; and, 2, that emphatically the question whether Jesus has arisen, can exist for no one who looks away from the character and worth of the person of Jesus; for the mere fact that followers and friends of Jesus were convinced that they had seen Him, while they also declare that He appeared to them in heavenly glory, furnishes, for one who is earnestly bent on establishing historical facts, not the least reason for the assumption that Jesus did not remain in the sepulchre.

Wherefore, in this case, history cannot furnish any succor to faith. Supposing the belief in the appearances of Jesus among the circle of his followers to have been—as it actually was—ever so firm; to believe, on account of appearances occurring to others, is an act of levity which will always avenge itself through recurring doubts. However, history does render a service to faith, inasmuch as it limits its scope, and thus points out to it the domain in which it belongs.

The question which history leaves open to faith is this: Was Jesus Christ entirely swallowed up by death, or, did he pass through the cross and sufferings to glory. i.e., to life, power, and honor? The disciples, from their sentiment of what Jesus was, ought to have been convinced on this head, even without having seen him in glory (a consciousness of this is found in Luke xxiv., 26, "Ought not Christ to have suffered these things and to enter into his glory?"); and we may properly add to this, that no appearances of the Lord could have given them a personal conviction of his life, if their hearts had not received a permanent impression of his person. Faith in the eternal life of Christ, and in our eternal life, is not a foregoing condition to becoming disciples of Christ, but the ultimate confession of one who is a disciple. It has nothing at all to do with a knowledge of the form in which Jesus lives, but purely with the conviction that he is the Living Lord. The determination of the form became dependent on the extremely different conceptions concerning future life, resurrection, and the glorification of the body, which were prevalent in that period. At an epoch which was, relatively, very early, the conception of a resuscitation of the body of Christ appeared, because it

was this hope, in the case of their own future, which animated wide circles of pious persons. Faith in Jesus, as being, in spite of the death on the cross, the Living Lord, cannot be produced by rational arguments or authoritative decrees, but, in the same way that Paul acknowledged to have been the case with himself, when he said: "It pleased the Lord to reveal his Son in me."

The conviction that they had seen the Lord was, indeed, of the highest significance to the disciples, and made evangelists of them; but, what they saw cannot help us. The Christian of to-day confesses with Paul: "If in this life only we have hope in Christ, we are, of all men, the most miserable." He believes in a future life with God for himself, because he believes that Christ lives. is the specific character and paradox of Christian faith. Such convictions cannot, however, become every-day self-evident convictions to a deeply-feeling, earnestly-thinking being, standing in the midst of nature and death. One possesses them only so far as he lives with all his heart and mind in God; and the prayer is also here applicable: "Lord, I believe, help my unbelief." To act as if faith in eternal life is the simplest thing in the world, or a dogma to which one must submit his mind, is irreligious. whole question concerning the resurrection, its nature and significance, became in later Christianity so entirely perverted, that men accustomed themselves to think of eternal life, even prescinding from Christ, as a certain expectation." (Page 26.)

It would require an entire article to untangle this flimsy web. It reveals a deep, religious longing and aspiration in the author for an assurance that there does exist a future life in God for those who are worthy of it, accompanied by wavering and misgiving; a subjective sentiment of a reason for hope that Jesus did enter into glory after death, as the precursor of his disciples, mingled with a hesitation, the result of a lack of a certain, objective ground of faith.

Of the grand fact and dogma of the resurrection, nothing is left, except a belief that the sanctity of Jesus, combined with his own firm expectation of eternal life in God, made his translation to glory in his spiritual nature credible. And besides, that some of the disciples may have had supernatural visions, which were real, and gave them a more vivid apprehension of that which they believed concerning their living and glorified Lord.

As to Dr. Harnack's conception of the character and office of Jesus Christ, and of the gospel which was exemplified in his person and taught in his preaching, it is true and good, as far as it is positive, but fatally deficient in its shortcomings. It is not so grossly and palpably absurd and incredible as the representations of Baur, Strauss, and Renan, and it contains an element of the su-

perhuman in the sense of superiority to our common humanity. But it is all the more dangerous on account of being more subtle, and evading the direct force of the arguments by which many able writers, and among them Dr. Fisher, of New Haven, have demolished the legendary and mythical hypotheses of the arch-sophists of Germany and France.

The person of Jesus Christ really possessed all the qualities, and exercised all the fascinating influence which Dr. Harnack ascribes to it. The gospel which he attributes to him was really contained in his gospel, with the exception of the elimination of all legal and external elements from religion. But these are not enough to make his personal character and Messianic office intelligible or even conceivable. They give us nothing more, unless in degree, than we have in St. Bernard and other Saints.

The whole mission of Jesus is unmeaning, unless it is regarded as the culmination of the work of the entire series of patriarchs. lawgivers, and prophets, from the beginning of the world, and the inauguration of the final and perfect world-religion, in which the kingdom of God upon the earth is realized and consummated. The exhibition of a perfect example of sanctity, and the preaching of a righteousness consisting in the love of God and man, with a disregard of the present life and the hope of a future life in God, presents no adequate idea of the character and work of the Messiah of God, the Redeemer and Saviour of mankind. It is a faint and feeble reflection of some features only of the authentic portrait in the gospels. Such a gospel as this is no sufficient cause of the Christian regeneration of the world. Consequently, Dr. Harnack is forced to represent it as an evanescent phenomenon. Historical Christianity, a new, different, and purely human construction must supplant it, before it has lasted a century. At last, Martin Luther, as a second Messiah, comes, to place the rescued gospel on the lamp-stand! And what has been the outcome of his mission? The production of some poor imitations and caricatures of Catholicism! It is a wonder, that at this day, honorable men and scholars should venture to pronounce the name of Luther in connection with the Gospel. And where is now the lamp-stand? Berlin? What light is the lamp giving? When is it going to shine forth for the illumination of the nations? Does Dr. Harnack fancy that his version of the gospel is going to command the consent of Germany, England, America, and the "evangelical lands," with their "concilium of scientific theologians?" Does he expect that they will strangle Catholicism and its "scrawny twin." Lutheranism? Suppose that work accomplished; dogmatic, ritual. organized ecclesiastical Christianity swept away; what is to come next? It is amusing to think of Dr. Harnack's and Professor Mitchell's pupils going forth from Berlin and Hartford to evangelize Germany, America, and the heathen world; to accomplish a work in which the Apostles failed. "It now remains to hold fast to and carry forward that which Luther began—Gott schenke uns nur ein festes Herz, Muth, Demuth, und Geduld!" (Outlines, p. 567.) This is mere cant, which does not sit well on a Berlin professor.

In respect to the means adopted by Jesus Christ for the preaching of the Gospel and the union of the disciples among themselves, Dr. Harnack expresses himself as follows:

"Jesus did not himself found a new religious community, but assembled a circle of disciples about Him, and committed the announcement of the Gospel to chosen Apostles.

There are some who think that we ought to regard the conception which the original community had of him, to have been that he was a second God, having one being with the Father, and that it is this concept by which all the language used and the judgments expressed by this community are rendered intelligible. But this hypothesis leads to the most violent perversions of their original utterances and the suppression or alteration of their characteristic features.

The contents of the faith of the disciples of Christ and of the common preaching which bound them to one another can be summed up as follows:

Jesus of Nazareth is the Messiah promised by the prophets; Jesus, through the divine resurrection, after death exalted to the right hand of God, will finally-come again and visibly erect the kingdom. Whoever believes in Jesus, and through a sincere conversion calls on God as Father, and lives according to the precepts of Jesus, is a saint of God, and as such may be sure of the forgiving grace of God and a share in the future glory; i.c., the redemption.

The confession of the God of Israel as the Father of Jesus, and of Jesus as the Christ or as the "Lord," attained its completion in the witness of the possession of the Spirit, who, as the Spirit of God, assured to each individual his calling into the kingdom, bound him personally with God himself, and was the pledge of future glory. The confession of the Father, the Søn and the Spirit is thus the unfolding of the faith that Jesus is the Christ, but it was not the intention in this confession to express the equality of the three great powers or the similarity of the relations of the Christian to the same; much rather the Father comes into view in it as the God and Father above all, the Søn as the revealer, and the Spirit as a possession." (Pp. 68, 69.)

This makes a clean sweep of the two fundamental articles of the

Christian Creed—the Trinity in Unity in God, and the Incarnation of the Second Divine Person. What the Son and Spirit are is left vague, but the denial of their equality as distinct Persons, with the Person of the Father, as a dogma of original Christian faith, is unmistakable. Of course, with these two articles of faith, all the other articles of the Catholic Faith as dogmas and the dogmatic profession of faith as the basis of the entire order of the Catholic Church disappears.

This is the precise scope of Dr. Harnack's thesis and argument. "They (dogmas) are esteemed in the Christian Churches as the truths revealed in the Holy Scriptures, the acknowledgment of which is the condition precedent to that felicity which religion places in prospect. Since the professors of the Christian religion did not possess from the beginning such dogmas, or, in the sense of a system combining single dogmas, such a dogma, dogmatic history has the task of finding out, first, the origin of dogmas, or the dogma, and secondly, describing the development or transmutation of the same.

"The moment when a dogma became a universally acknowledged article of faith constitutive of the Church was the latter part of the third century." (P. 3.)

The transmutation of original Christianity into Catholicism was, therefore, a change from the religion of the Gospel without dogmas into a dogmatic Christianity, and the period of transition was between the latter part of the first and the latter part of the third century.

There is an adroit introduction into the definition of dogma of an element which much facilitates the effort to contrast the doctrinal character of the primitive church with that of the church already confessedly Catholic.

"Dogmas are the Christian doctrines of faith, having for their contents the knowledge of God, the world, and the means of salvation ordained by God, in formulated concepts, which are expressed in terms suited for a mode of treatment which is both scientific and apologetic." (*Ibid.*)

The phrase "formulated concepts" is sophistical, and furnishes a verbal cover for the contradictory and mutually destructive principles of Harnack's theory of the Gospel. It is plain enough that Christ and the apostles did not promulgate the Gospel under the form of a systematic theology, and scientific definitions like those of the great councils. It is not, however, of the essence of dogma that it should have this kind of formulation. A doctrine revealed by God and proposed by the authority which He has appointed, with the command to give the firm assent of the mind to it on the motive of the divine veracity, is an article or dogma of faith. The

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writings he considers authentic and credible. More than this, he lets a skepticism about the certainty of his own hypothesis concerning the person and work of Christ, and even of His existence appear, and pretends to no more than a probability for his own theoretical view, which leaves the whole question still open to critical discussion.

Now, all Protestants who profess to be orthodox are bound by their own confessions and by their system to reject totally the theory of the anti-Christian school of German theological professors at Berlin and elsewhere, and to adopt the Catholic thesis concerning the origin and development of dogmatic Christianity. They are thus left without a spot to stand upon in their contention against Catholicism. They are logically and historically compelled to accept the third century as the witness and exponent of apostolic Christianity in every sense. Hence, even some of those in Germany who wish to pass for genuine Lutherans are beginning to slide down toward the position of those who arrogate to themselves the title of critical and scientific theologians. The same movement is beginning in England and America. It is becoming more and more evident that there is no stability in doctrine or in ecclesiastical order anywhere except in the Catholic Church. The Bible, Christology, organic unity, have no security and no immovability except on the foundation of the Rock of Peter. The encroaching tide must sweep away all those human and temporary foundations on which the structures have been erected which have been designed to be both Protestant and Orthodox. Learned and able Protestant writers who have attacked with signal success the anti-Christian critics in defence of the New Testament and of some fundamental dogmas of Christianity, are inconsistent semi-Catholics. In their arguments for the authenticity and inspiration of the books of the New Testament, and the apostolic origin of the dogmas retained in the principal reformed confessions, they write as Catholics. But when they attempt to prove that other essential parts of Catholicism had a human origin, and that a transmutation from Apostolic to Catholic Christianity was imperceptibly effected during the second and third centuries, they write quite in the spirit and according to the method of Harnack and his fellow-professors. The only question is, whether to keep or to give up the Christ of the Evangelists and Apostles together with the Catholic faith and Church. Christ and the Church are one and inseparable. If the Church of historical Christianity is a post-apostolic invention, the Divine Christ proclaimed by the Church is a similar invention, and as only a human Church, so also only a human Christ is left. And this is precisely the contention of Dr. Harnack and his compeers.

rather he maintains the necessity of so accounting for it. The following are his own words:

"We cannot think at all about the impressions which the external world produces on us without thinking of them as caused, and we cannot carry out an inquiry concerning their causation without inevitably committing ourselves to the hypothesis of a First Cause."

But a First Cause is plainly one that is unproduced and independent as to its existence, and, therefore, one that is self-existent. Consequently, in accordance with Mr. Spencer's own assertions, we cannot carry out our inquiry concerning the causation of the impressions which the external world produces on us without committing ourselves to the hypothesis of a self-existent cause.

Nor is this necessity merely subjective, illusory, or disconnected with objective truth. It might seem that such is, in fact, the view taken by the apostle of the understanding; for, no sooner has he mentioned the First Cause, than he tells us that its conception is self-contradictory, from whatever side it is considered. Were he really to maintain that our mind, by an irresistible intrinsic necessity, imposes on us the most absurd notions, and forces us to base on them the explanation of the universe, he could no longer regard philosophy as a rational science, but would be compelled to look upon it as a mere mental delusion. Such a suicidal self-contradiction we cannot attribute to the leader of modern speculation. terpretation to be put on his words is plain enough. He denies the possibility of a definite, but forcibly asserts the necessity of an indefinite conception of the First Cause. It is in this sense, also, and in this sense only, that he terms the same cause an unknowable power.

We repeat, then, all philosophers, Herbert Spencer included, are unanimous in tracing back the existence and order of the world to a self-existent universal cause. He who makes an exception must renounce the name of philosopher and profess himself a destroyer of reasoned knowledge.

There was, however, at any time, the greatest difference of opinion as to the nature of the self-existent cause, and as to the kind of operation by which it has produced this well-ordered universe. What essential attributes the being has, which, existing of itself, is the cause of all other existence; how, absolutely independent and eternal as it is, it brings into being things that are dependent and temporal; and, how it reduces them to such wonderful order and unity—these are questions on which the philosophers disagree, and branch off into schools as hostile to one another as armies ar-

¹ Ibid., § 12.

as the constituents of all things, are not a creator, but are complementary aspects of it, forms or modes, under which the conditions of consciousness oblige us to represent it. The particular existences are not beneath it or dependent on it as a higher extrinsic cause, but involve it as a common element, or as a general reality lying at their bottom. This will be plain, as soon as we understand how the persistent force comes to be the absolute, unknowable power. Existence is continued manifestation; and things knowable to us are nothing but manifestations, those of them which are vivid making up the outer world, those which are faint the inner world or the ego. But every manifestation carries with it the irresistible implication of a power that manifests itself to us, and, consequently, all of them the implication of a power that is always present in our consciousness. For the power implied in every manifestation must, while everything changes, remain unchanged, and must, while thought succeeds to thought, alone persist in our mind. And yet, though always present in us, it cannot be definitely known. For, as all particular manifestations of whatever form and under whatever conditions pass away, it alone remaining constant, every particular conception must be denied of it by the philosopher. It therefore becomes unknowable, unformed, unlimited, unconditioned. The consciousness we have of it is only a general, indefinite notion, the abstract of all thoughts, ideas, or conceptions, the raw material of thought, to which in thinking we give definite forms. And, as in consciousness, so it is also in reality. Continued manifestation being existence, it follows, that the power implied in every manifestation and always present in the mind, is a general, abstract existence; that it is the element common to all things, that which is, in itself, unformed and indeterminate, yet is formed and determined in every particular being.1

The theory of evolution, as thus set forth, the theory of the evolution of all from one self-existent immanent principle, is nowadays considered not only as the fullest explanation ever given of the unity and order of the universe, being a system of perfect monism, plainly reasoned out in all its details, but also the only one which, as overcoming any kind of dualism, gives satisfaction to the human mind. For, if one and the self-same principle is not the source of all, existing unity cannot prevail throughout creation. If this one principle is not supposed to be immanent in the world, nature is not explained from itself, but rather is rendered unintelligible; that which is plain and visible in it being accounted for by something unseen and unknown. And, if this one immanent principle is not regarded as absolutely independent and self-existent, it be-

¹ Ibid, && 26, 40, 41, 44.

First Cause is assumed to be immanent in the world gradually transformed and determined, it is rendered essentially indeterminate; and, inasmuch as it is assumed to be self-existent, it must be understood to be fully determined by its own essence. Being essentially indeterminate, it cannot determine itself by its own activity; being fully determined by its own essence, it cannot undergo a process by which it is gradually determined. A more startling contradiction could not be conceived. Proofs shall be advanced for each of the propositions laid down.

The First Cause, immanent as a universal power in a world which is, at first, altogether indeterminate, must, of necessity, be also indeterminate. The whole is necessarily endowed with the perfections essential to its constituents, and especially with those essential to its main constituent.

But, according to evolutionary views, the universe is constituted by the First Cause immanent in it as its main, if not as its only, component part. Consequently it must be conceived of as having reached determinateness, if the First Cause is supposed to be determinate, and can be thought of as indeterminate only when this same cause is left in indeterminateness. And even when the world comes to be fully determined by the forms of existence with which it is clothed in never-interrupted succession, still the First Cause must be conceived of as being in itself indeterminate. For it is distinct from the determining forms, they being effects produced by its immanent activity, and is even separable from them, because they continually come and disappear, whilst it alone persists. It is that which underlies them all as a common element, as the cause that gives them being, as the substratum that receives and sustains them. Accordingly it must be considered as a general entity which, being in itself indefinite, remains steadfast under the everchanging particular determinations. So, in fact, Mr. Spencer has described it; for, as we have seen, according to him it is the element common to all things, that which, being in itself unformed and indeterminate, is formed and determined in every particular being, though not permanently, but temporally only.

But if the First Cause is of itself indeterminate, it cannot produce the forms by the putting on of which it shapes the universe and makes it pass from indeterminateness to determinateness. It is absolutely impossible to conceive of it as sufficient to the production of these effects. And yet such it must be if the principle holds that every effect must have a sufficient cause, the principle which serves as a basis for all philosophical and scientific inquiries. For, when is a cause sufficient, or, what is the same, when is it proportioned to the production of a given effect? Only when it pre-contains the latter's perfection either under the same or a higher

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form. This is not a tenet blindly admitted or postulated by ancient philosophy; it is an undeniable axiom of reason, adopted also by science and confirmed by experience. The impulse given by a mechanical power is not and cannot be stronger than the power itself; the motion communicated is not faster than that of the body communicating it; living beings do not perform functions belonging to an order higher than their own; parents do not beget offspring that is of a kind superior to themselves.

This axiom being borne in mind, it becomes evident that the First Cause, if it be indeterminate, cannot produce the forms of existence by which it is itself determined and the universe reduced to shape. For being unformed, it excludes all forms, and being indeterminate, it contains no determination. Nor can it be enriched or impregnated from without, for, being first, it is the source of all other beings. Should the First Cause, though indeterminate, by determining itself determine the things existing, as the evolutionists think it does, it would be necessary that whilst it is altogether empty and formless, it emits the infinite variety of forms which delight our eyes, and educes out of itself all the grandeur and beauty of the universe, all the peculiar natures of the organic as well as the inorganic world, the culture and peculiar energy of the human mind, the organization of society, the course of all the events which make up the history of mankind. Could any process be more absurd, more contradictory to all the laws of reason, and to the law especially that demands a sufficient cause for every effect?

This is, however, only the first of the many contradictions implied in the idea of evolution. At the same time that the First Cause is assumed to be indeterminate, because immanent, it is to be considered as completely determinate by its own essence for the reason that it is self-existent. As self-existent, indeed, it must be conceived of; for were it brought into existence by some other cause, it would no longer be first and absolutely independent. But that self-existence implies full and necessary determinateness is easily understood.

Whatever exists is individual and has its peculiar properties and degree of perfection. There exists no general being which is identical with things differing among themselves. There is no being that is not either rational or irrational, living or not living; no animal that is neither of this nor of that size and shape, neither of the one nor of the other kind; no plant that does not range under some species or does not require for its development certain conditions and has not certain potentialities. Existence necessarily implies determinateness.

The determinateness peculiar to the self-existent being results

from its essence. If whatever exists is necessarily determinate, the self-existent, having existence by reason of its own essence, has by it also its determinateness; and this determinateness, being essential, is of absolute necessity. The properties and perfections implied in an essence can never be wanting in the being constituted by it. A man can never be without reason, nor a body without matter, reason and matter being included in the essence of man and of body. Consequently the self existent can never be divested of any determinant involved in its essence. Nor can perfection and properties accrue to it which determine it in a new manner. For, since to be determinate or to be differentiated means to exist so and not to exist otherwise, the essence which gives a being determinateness of one kind excludes from it determinateness of any other kind. By reason, therefore, of its essence the self-existent is so determined that it cannot in any way be determined differently, so constituted in a certain degree of perfection that any other degree is absolutely repugnant to it.

Hence it follows that full and complete determinateness is a necessary attribute of the self-existent. For what being is more completely determined than that which cannot be otherwise than it is, which with absolute necessity excludes any properties different from those which it actually has? And we must furthermore infer that determinateness does not come to it by complements added, nor by forms put on, but is intrinsic to its very being.

Thus determined, the self-existent cannot possibly pass from indeterminateness to determinateness. This is plain at first sight, and it becomes still plainer on attentive reflection. Owing to its full and essential determinateness, the self-existent is clothed with attributes which are necessarily opposed to growth in being.

The self-existent is without any potentiality. For, being determinate by its own essence, it cannot be stripped of any of its perfections, nor can it acquire any new perfection or perfection in a new degree. It is, therefore, always in complete actuality. We cannot even distinguish in it anything that receives and perfection that is received. It is all perfection. Hence it must be conceived as of pure actuality.¹

Then, if the self-existent is without any potentiality owing to its essential determinateness, there is in it no distinction between possibility and actuality, between essence and existence, between the subject that is and its nature. It is consequently being itself, self-subsisting, unreceived, and completely actual.

Furthermore, the self-existent is infinite, that is, possessing all

¹ S. Thomas, Sum. c. gent., lib. i., c. 16.

¹ Ibid., pp. 21 and 22.

pure perfections in the highest possible degree; by pure perfections those being understood which are unalloyed with any imper-Being determined of itself, as it is existent of itself, it actually has all perfections agreeing with, and excludes only those repugnant to, its essence. Now there is no intrinsic repugnance between self existence and infinity; on the contrary, the possession of all perfection in the highest degree must be conceived as intrinsically possible, because it does not imply being and not being, affirmation and negation, and as possible in the self-existent alone, because dependence in being is an imperfection. Moreover, the self-existent, being free from all potentiality, is Being itself, Being unreceived, and hence not restricted by any subject in which it is received, nor limited by any cause by which it is produced. But, what is comprised in Being? All perfections in their highest degree; for every perfection is being, and only the fulness of them is equal to the fulness of being. Accordingly, the self-existent is perfection unlimited.1

Again, the self-existent being is absolutely simple. Composition is irreconcilable with its complete actuality, its infinity, and its necessity. Component parts do not imply one another's reality, but only the possibility of being united; nor do they contain the perfection of the whole which they constitute; they only concur in forming it by mutual union. Every part, therefore, is finite and involves potentiality. And such is also the whole formed of them. It has been reduced from potentiality to actuality, and, therefore, may or may not exist, may or may not have perfection and completeness. It is necessarily, also, finite; for, of finite parts the infinite cannot be made.²

Lastly, the self-existent is absolutely unchangeable. This attribute is an obvious consequence of necessary and essential determinateness. Besides, changeableness presupposes in the being changed incompleteness and potentiality—for, how else could transition from one state to another be possible?—and, it moreover implies distinction and at the same time composition between a substratum which persists, and of forms which in it succeed one another. The self-existent, therefore, being absolutely simple and purely actual, is not susceptible of any change.³

In a word, the self-existent being is the sum and height of all perfection, not of such as is limited, or received, or implies division and composition, but of that which is pure, unlimited, unreceived, and altogether simple. It is the ocean containing all being, which cannot decrease or increase, because all is in it, and all is essential to it; an ocean without shores, boundless in extent

¹ Ibid , p. 28.

³ S. Thom., Sum. Theol., i., qu. 9, art. 1.

² Ibid., cap. 18.

and eternal in duration, subject to no change, but always tranquil, and yet, though unchanged, most manifold in grandeur and beauty, and though manifold, yet absolutely one and indivisible. The self-existent is above this finite and unstable world. It is the source of changeable beings, but is itself unchangeable; it is the cause of finite existences, but is itself infinite in perfection, comprising all that is great and beautiful without any limit, and without any shadow of imperfection. It is the source of all life we admire in this universe, but, being unreceived, it is life itself, the most perfect life, hence not matter, but spirit, intelligence and wisdom, beauty and holiness itself.

The nature of the self-existent, as thus described, shuts out advancement from indeterminateness to determinateness as necessarily as light shuts out darkness. Growing in perfection, in determinateness, in complexity, in heterogeneity, is perpetual change; presupposes finiteness and incompleteness, distinction and composition between a substratum and forms, which successively determine it all attributes which we have seen to be directly repugnant to the nature of the self-existent.

The being which is evolved, which passes from lower to higher stages, from the indeterminate to the determinate, is never fully actual and complete, but always remains imperfect; it is not above the vicissitudes we experience, but is identical with the world that ever changes; it does not resemble the boundless, ever-tranquil ocean, but rather a river, which, running down a mountain slope, always increases from unknown sources, yet never reaches the sea to find its rest; it is not the fulness of Being unlimited and indivisible, but only a small portion of being, limited, and consisting of component parts; not life, perfection, and beauty unreceived and self-subsisting, but some degree of life and perfection received, and constantly dying away.

To sum up the conclusions arrived at: the general idea of evolution, if carefully analyzed, proves to be a labyrinth of incongruities. As represented by it, the First Cause is clothed with contradictory attributes. As immanent in the ever-changing and developing world, this cause is indeterminate; as self-existing, it is fully determinate. In consequence, all its properties are set in opposition to one another. Inasmuch as it is indeterminate, it is imperfect, finite, compound, and changeable; inasmuch as it is self-existent, it is supremely perfect, infinite, simple, and absolutely unchangeable. To enhance yet more the contradiction, every one of its attributes is essentially inconsistent with transition from indeterminateness to determinateness. If indeterminate, the First Cause cannot, by its activity, develop from itself the forms by which it is determined; if fully determinate by its own essence, it

THE NEWEST RITUALISM IN ENGLAND.

CO rapid has been the spread of more or less "High Church" O doctrines and practices in England during the last ten or twelve years, that it is now the rule, rather than the exception, among Anglicans to be in some sort of this tendency, and to belong to one or another shade in the almost infinite prism of what they call Anglo-Catholic opinion. Throughout country and city evidences of the prevailing tone abound. In the churches it is the usual custom to have a cross on the communion-table, flanked by candles and vases of flowers; and not the wildest Orangeman in the whole Church Association would dream of trying to prosecute a clergyman for the use of such ornaments now. The Association still exists and lectures, but its palmy days of persecution and triumph are over, and even the bishops of its own party have withdrawn from it much of the ægis of their protection.1 Practices are accepted as usual which not very long ago were looked on as implying "Extreme Views"; while Ritualists who formerly contented themselves with modest manifestations, have now burst out into the fullest blaze of vestments, banners, and incense. The whole standpoint of the Church of England is higher than formerly. This does not imply that Anglicans are more united; for the forty or fifty gradations of Ritualism and high churchism and broad churchism causes plenty of heart-burning and inward dissatisfaction even now.

But it seems as if the higher gradations, the "Extreme Views," were carrying the day, even if they have not carried it already. This, at least, is what we gather from Archdeacon Farrar's bitter farewell article in the "Review of the Churches," the editorship of which periodical he has lately resigned. Archdeacon Farrar is a man who has been generally considered High Church. At one time he won applause even from the Ritualists, when he heroically demanded that a founder should step forward (like a Benedict, a Francis, or an Ignatius) to establish a great religious order in the Anglican Church; but no St. Benedict was forthcoming, and the Catholic papers rather satirically asked why Canon Farrar should not be the founder himself? But if he has ever pleased the Ritu-

¹ For instance, the evangelical Bishop Ryle, of Liverpool, raised objections to the delivery of a Church Association lecture in a place where extreme Ritualism prevailed, on the ground that charity would not be served thereby, and that he disapproved of clergymen holding meetings in another clergyman's parish without his sanction.

trials from its own brethren who stop half or three-quarters of the way up the Ritualistic ladder. All sorts of miseries arise from this last cause. When advanced Anglicans find themselves in a new place, their first care is to discover "what kind of a church there is," and to what gradation of opinion the rector or vicar belongs. They know that anything is possible, but the probabilities may be broadly classed as three. A brief inspection of the Church and the notice-board is enough to enlighten the anxious inquirer as to whether the Church is "quite low" or quasi-Calvinistic (a rare thing now, fashion setting strongly against Calvinism), or whether it produces that even more exasperating, because more unmeaning, phrase, the "moderate hearty service"; or whether the clergy really hold "Catholic views." In the first case, the interior is cold and bare, and the notices will announce the hours of morning and evening prayer on Sundays, with the Lord's supper after the services on the first Sunday of the month; and the outraged Ritualist turns away with indignation, only congratulating himself that even the bishops are turning against that sort of thing now. In the second case, there is perhaps a cross behind the communion-table, and there may be vases of flowers, but no candles: all other desired symbols are absent, the tendency is towards mid-day non fasting communions, and one feels sure that "Anglican chants are used," and that the sermons avoid "all contraverted points"; in short, that the "moderate hearty service" means "vox et præterea nihil." But in the last and most welcome case, a variety of functions, "Early Eucharist," choral celebration (sometimes boldly called High Mass), daily matins, "spiritual consultations after evensong on Fridays and Saturdays," etc., are announced by the notices, while the chancel glows with flowers and the ecclesiastical color of the season, the stations of the Cross adorn the walls, and a florid and exuberantly incorrect imitation of the ornamentation of real Catholic Churches prevails. Of late a craze for lamps has broken out; a specimen of the whole spirit of Ritualism—a symbolism with nothing to symbolize. Their inspection of Catholic Churches has shown the good inquisitive Ritualists, ever on the search for new ideas: 1, that we always burn a lamp; 2, that in the larger churches there are often three or more lamps before one of the altars, and occasionally a smaller one before some other less richly adorned shrine. Forthwith they hang up seven lamps before their "High Altar," and three before the side altar which they are so proud of possessing (its existence is often announced in the advertisements); and there the lamps burn away solemnly—in honor of nothing! The outward visible sign is there, mendaciously assertive, but the inward spiritual grace is wanting.

or "Six Points," sometimes reduced to only five in the case of incumbents who pique themselves on not going too far, and who leave one wondering whether they are willing to do without wafer bread, or the mixed chalice, or altar lights, or vestments, or incense; or whether the eastward position, so long fought for, may be given up after all. Here and there comes in an ominous and unsatisfactory announcement of "Not extreme," or "Moderate views," or "Thorough Churchman," or "Moderate High," all implying the most painful vagueness and rampant ascendancy of private opinion. Where but in an Anglican Church newspaper would one find three such advertisements as the following in the same column? "Wanted, Priest, Catholic; six points. Daily celebration and evensong." "Experienced Priest, Catholic; Ritualistic minutiæ not desired." "Wanted as Curates Clergymen of Evangelical Church Views, gentle manners, and some ability in desk and pulpit." Could anything be more unconsciously satirical than the reference to Ritualistic minutiæ? And do not the Evangelical Church views, and the reference to desk and pulpit, smack of a very old order of things, which has no attraction at all for the young and ardent spirits who want to Catholicize the Church of England? And, again, what sort of a church can that be which requires Catholicizing?

The spirit which makes all this possible among Anglicans is quite incomprehensible to a Catholic, unless he also take into account the Anglican habit of mind, and the training which teaches that error is compatible with a Divine mission to teach, and visible division with essential unity. This fallacy, which so curiously leaves private judgment practically free while it supposes the acceptance of Catholic doctrine and ritual in general, and opens the way for every vagary and caprice of the clerical fancy, has been the origin of all those curiously made up services, fancy monastic costumes, and selections of teachings from the Fathers, which have surrounded Ritualism with an ever-varying and sensational brilliancy.

And yet here, as in so much else which partakes of man's wilful, natural childishness,

"There's a divinity that shapes our ends, Rough-hew them how we will";

and an influence, we may well believe, is governing the course of Ritualism, of which the Ritualists themselves are little aware. So rapidly is the new movement devouring the dull, uninteresting old Protestant sects, so great an attraction has it for the cultured classes, so hopefully is it beginning to shake up the long dormant religious instinct even in the poorer classes, who so long held aloof

their internecine divisions, the thousand discrepancies which mark their church as a human affair and ever so clumsy a one, these things are blinked and set on one side, while they bask in the blaze of a gorgeous ceremony or listen to the strident claims of their leaders. The most brazen assertions are made in the hope of linking Anglicanism to the universal Church-I had well-nigh said the most brazen lies, but this would be in itself an assertion contrary to truth as well as to charity. No doubt the lies are material, but those who utter them have nearly always, if not quite always, convinced themselves of their own sincerity. It has often been said of Anglicans by Catholics that the laity are sincere, but that the clergy, who lead the laity, and direct them, and tyrannize over them, and keep them out of the Church of God, are in wilful error-are, in fact, selling their birthright and the birthright of others for the mess of pottage which the Establishment provides. But, like most sweeping condemnations, this one requires to be Cardinal Newman's "Apologia" has shown in the most perfectly historical manner how one of the truest, and noblest, and purest souls that ever lived could innocently, and even conscientiously, deceive itself for many years, fearing to offend God by leaving the Church of England, even when the discrepancies and persecutions of that Church had made communion with it intolerable and well-nigh impossible. In like manner can many a clerical convert of later years give an account of the thousand influences which held him back—the sight of well-doing in his own Church, the fallacies plausibly painted up to look convincing, the example of men of good lives who have yet finished their course within the elastic pale of Anglicanism, and the strange illogical proposition, which has misled so many, that it is a man's duty to stay where he was born and bred. That conscience becomes strangely but inculpably false which has been led to look on the thought of leaving the Church of England as a thought mortally sinful, and only God can judge of the amount of its guilt, if any, in putting that thought away.

No doubt many a poor soul is glad to think that its duty lies in the old familiar paths. Those paths are smoother than they were in Newman's Anglican days. The "Catholic Revival," as its disciples fondly call it, has progressed since that time, and has enlarged its borders, and victoriously swept within them almost the whole of the cultured classes who are practically Christians at all. The very bishops, who gave so much trouble in former times, when they "freely handselled their Apostolic weapons in the Apostolic party," have been partially converted by their flocks. One of them, the Bishop of Lincoln, is a sincere and thorough Ritualist, an enormous gain to a party which for many years had not a single

less; guilds and confraternities spring up in every parish; books and periodicals are poured forth from the doctrinal press; shelters and free dinners and clothing depôts are established by the energetic and self-sacrificing sisters. One thing only is wanting, the spirit of obedience binding the work together, and perpetuating it as only obedience can. And it is the want of this spirit which betrays the Ritualist into those incongruities, those uncertain flounderings and self-contradictory manifestations whereby their zeal is in some sort discredited and coupled with a sense of the ridiculous.

One of the most deplorable of the Ritualistic peculiarities is undoubtedly the spite, the envy, hatred, and malice, with which a certain section of the party regard that Catholic Church whose name they usurp. Their accusations against her, their assertions that she has erred and contradicted herself (to prove which fact they would move mountains, if they could) would suffice if believed, to condemn Christianity itself as a mere myth, and to show the Divine promises as having failed in every particular. The Ritualists do not mean this; it is the logical outcome of their doctrine, but they never follow a proposition so far as its last conclusion; to do so would be to destroy their system altogether. Their very contention that "the Church consists of all Christians who have real sacraments" is a most unfortunate one for them who are face to face with the standing misery of numbers of their own clergy still disbelieving the necessity of any sacraments at all, to say nothing of the validity of their orders being denied by Christendom in general.

Poor souls! They are always heaving this question of the orders uphill, like the stone of Sisyphus, only to see it roll back into the valley of endless uncertainties, and to tread forever the same interminable ascent. Deeply as they may hate Rome, they have no keener ambition than to show that she, or some one connected with her, has in some round-about way recognized their succession. They have produced a book which "begs the question in its very title of 'Rome's Tribute to Anglican Orders,'" and which, on the ground of a few accidents and misinterpretations in foreign parts,²

¹ A community of these, established at Kilburn, London, N. W., has made itself quite famous in the metropolis for its good works. It has an orphanage, day-schools, several depôts where the poor can buy decent clothing at nominal prices; it dispenses good meals to starving children, and sends food-trucks into the poorest parts of the town where working-men congregate; a whole page might be filled with a list of its charities.

² On the Continent generally, but especially in its more secluded corners, but little is known of Anglican pretensions to Catholicity and priesthood, and the request to "say Mass" of enterprising clerical tourists has sometimes been allowed by careless sacristans under the impression that the said clerics were like the United Greeks or the

claims the recognition of Rome for their succession in the face of her unconditional re-ordination of their clergy. As this book, though trivial enough in itself, is misleading souls, it was made the subject of a lecture and disproved from cover to cover by Father Breen, O. S. B., at Archbishop's House, Westminster, on the occasion of a meeting of the Historical Research Society. This society, instituted by Cardinal Vaughan for the purpose of giving free lectures and encouraging subsequent discussion, may do much towards throwing down the two pillars of ignorance and sophistry on which modern Protestantism rests.

"But," some outsider will exclaim, "as the Ritualists can only have derived their orders from Rome, they are naturally anxious to think that she acknowledges them." He is mistaken. The advance party maintain that they derive their orders from the old English Church, with which their own is continuous. Simple persons were accustomed to think that the old English Church was Roman Catholic, and the world in general thinks so now. But the Ritualist knows better. Continuity is his present craze, and there is no laughable misinterpretation, no maniacal self-contradiction to which he will not have recourse to prove it. In his mouth continuity is a word that has no meaning, for it must consist in something, and where is that something? Here, again, I must have recourse to Father Breen, who has done so much for Catholic controversy, and whose learning is emphasized by the quiet and self-contained style of his speech and writing. In a letter to the Leeds Mercury the reverend Benedictine wrote thus trenchantly and to the point: "To continue means to remain the same." In order to prove the religious continuity of the post-Reformation Church with the pre-Reformation it must be shown that (1) its constitution, (2) its creed, (3) its discipline remains the same as it was before. You must prove that the constitution of a Church which accepts the Royal supremacy as its raison d'etre remains the same as the constitution of a Church which held the Papal supremacy to be the divinely instituted principle of all Church government. You must prove that a creed which holds the sacrifice of the Mass to be a "blasphemous fable and dangerous deceit" remained the same with a creed which held the Mass to be the highest act of Christian worship. You have to prove that the discipline of a Church which

Maronites, having a liturgy of their own, though in communion with the Holy See. Such a case occurred some years ago in a town in the south of Italy, where two clergymen "said Mass in English," with each other for servers, at the tomb of one of the Apostles. The fraud was discovered some weeks later by a real English priest on his being asked by the Sacristan whether he would say the Latin Mass or use his own missal.

allows the marriage of the clergy remains the same with that which forbade it."

These sentences put the case in a nutshell; but even now the Ritualist will go on striving against facts, proving black white and the unreal real; he will tell you in the face of every mediæval ecclesiastical record that the old Church of England did not acknowledge Papal supremacy, that ancient Saxon Church discipline permitted clerical marriage, and so on ad infinitum. As to the Articles, though he cannot deny that the Church of England invented them in a Calvinistic spirit, he still maintains that they do not bind the Church of England, nor express her true mind; and that nobody who signs them is expected to believe in them, an evasion and mental reservation which would be very hardly dealt with if it were the condition of Catholic ordinations. The "perfect flower" of this jealous hatred of Rome lately blossomed in The Parish Magazine, a periodical published in London, and localized in various parishes, and has been going the round of the Catholic papers to the no small amusement of their readers. A beneficed clergyman of the Church of England is responsible for this manifestation. He says: "The oldest Non-conformist to-day in the kingdom cannot claim to be more than three hundred years old, while the present Roman mission and body in England are of far more recent origin, dating only from 1850, the year in which they were founded by Pope Pius IX. Neither this Roman hierarchy nor its mission have any connection whatever with the past history of the English Church and nation," etc. The amazing effrontery of this assertion contrasts oddly with the calmly historic assertion on another page of the same magazine: "In the days when Roman Catholicism was dominant in our land, ministers were as numerous as they are now scarce," etc. In fact, the new pretension that England was never a Roman Catholic country is too extravagant to be maintained consistently even in the very publications where it is advanced. It is in itself the very newest doctrine of one of our newest sects. They certainly make the most heroic efforts to live up to it. They calmly write as if they positively had nothing to do with Latimer and Cranmer and Barlow and Henry VIII., who severed England from Catholic unity, and burned and starved the monks and seized the revenues of the monasteries, but rather as if they were one with the Church which was persecuted, though they know that the heads and faithful members of that Church suffered death and imprisonment rather than deny that supremacy of Peter, which they, with Henry VIII., repudiate. They have recently sent to Malling, in Sussex, exactly as many mock Benedictine nuns as the king expelled real ones from that foundation at the time of the suppression of monasteries,

and the High Church papers jubilantly recall the fact. Well might a convert from Anglicanism lately remark that it might be said to the Ritualists, as our Lord said to the Jews, "Your fathers killed the prophets and you build them sepulchres."

But the strangest self-contradiction in the whole medley of selfcontradictions is the fact that in the face of the endlessly repeated assertions of continuity with the old English Church, a half-concealed but very real movement has been on foot for several years past to import real orders into the Anglican Church. It is an open secret, if a secret at all, that an Anglican clergyman sought reordination and consecration at the hands of a foreign sectarian bishop, and that he has subsequently reordained many of his fellow-clerics, thus entirely giving away the claim to continuity, since what need can there be of new orders if the Parkerite Succession, as preachers and Church papers spend all their breath in asserting, is one with the Succession of the Old English Church? The new hierarchy, who exist and act sub rosa, and, of course, without recognition by Drs. Benson and Thompson and their suffragans, are a living denial of the continuity theory; but at least they have the comfort, if any, of knowing that they possess real schismatic orders, and they, as Father Gallway, S. J., wrote of them in 1878, "galvanize into ghostly life" some portion of the English Establishment. But here, again, no one knows exactly what portion is being "galvanized." At one altar you may have a real priest, ordained, it is true, in and to rebellion against Peter, but still a priest, celebrating a real Mass and communicating with a Consecrated Host, while at another stands the mere parson, depending for his title to priesthood on Parker and Barlow and a line of unconsecrated and probably unbaptized prelates. At one death-bed the man whose orders are "not doubtful, but absolutely invalid," takes on himself to absolve the parting soul, at another a schismatic priest exercises the jurisdiction which the Church allows to him in that extreme hour. Full of uncertainties and of confusion as the Anglican Church has ever been, this alone was wanting to complete the misery of her state, that through a clandestine and lawless ordination real priesthood should be somewhere lurking within her bounds, though the communicant and the penitent know not exactly where. Certainly the Catholic was right who, in answer to the boast that the Anglican Church reverted to primitive times, admitted that it reverted to the most primitive time of all—the state of chaos!

It may well be asked how a movement so full of illusions as Ritualism, especially one marked so strongly with that hatred of the Church of God which is said to be essentially diabolic and not natural to the human heart, can be doing God's work? and how

THE CLUNIAC AND HIS SONG.

Never did Poesy appear
So full of heaven to me

—Lowell.

THE above caption has been made as vague and general as possible, not for the sake of bewildering the "gentle reader," but of warning him beforehand that he must expect little information of any kind—authentic or otherwise—of the Cluniac. But we shall have more to say of the song than of the singer, and we can therefore modestly congratulate ourselves on the aptness of our text. For while it is itself the thought of a singer,—our greatest American poet—it presents to us, as every text should, a compendium which shall be nothing less than a crystallization of our after-thoughts. And, indeed, while we know little more of the monk of Cluny than his name, Bernard, his poem, "so full of heaven," has been republished some half-a-dozen times; while extracts from it have been turned into English verse, with varying metre and varying success, about as often.

We have said that his poem is "full of heaven"; yet is not heaven his theme! He sings again the old, old song—older still than its utterance on the lips of Solomon, what time he saw, in all the pleasures of life, only "vanity of vanities." But while earth is the theme, heaven is the text; and in the singer's vision of the "Apocalyptical splendors," viler and viler becomes the immindus mundus.

Despite the vagueness of its title, it is the design of this paper to give what fragmentary account is possible of the Cluniac, and to attempt a translation into English of some verses of his wonderful poem.

Viewed from the standpoint of literary biography, Bernard of Morlaix, monk of Cluny, reproduces very strikingly many features of the life of Sedulius, the Poet of the Incarnate Word. The birth-place of each has been a matter of dispute. The student of hymnology need not be reminded that the latter poet has been claimed, at various times and by various biographers, for nearly every then civilized land under the sun,—for Ireland, Scotland, Rome, and Spain. So, too, Bernard has been assigned to Morlas in the lower Pyrenees and to Morlaix in Bretagne; while Pitseus makes him an Englishman,—" natione anglus." Neale harmonizes

must have been a laborious one in many respects, if that notice, found in the Cluniac Chronicle, refers to our Bernard: Ipsius Petri Venerabilis tempore fuit Bernardus monachus prior Cluniacensis, totus religiosus, totus erga conventum laboriosus, et Ecclesiam Cluniacensem semper summa cum charitate amplectens. Quem ipse Petrus Venerabilis abbas Cluniacensis commendans epitaphium de ipso Bernardo tale quod sequitur descripsit.

"Egregius senior cui nil juvenile cohaesit,
Bernardus prior hac pausat humatus humo,
Hic post militiam coelestia castra subintrans,
Consenuit, certans hoc in agone diu.
Iste sibi pro te nunquam, Cluniace, pepercit,
Huic sibi nulla dies absque labore fuit.
Sic bene totius pondus tolerando diei,
Nummum promeritum sero reportat ovans.
Hujus, vos fratres, memores estote sepulti,
Nec cadat ex animo quod tegat ossa solum."

Turning now from the man to the poem, we may console ourselves with the reflection of Carlyle, that "there is no heroic poem in the world but is at bottom a biography, the life of a man." Time, which has hidden his personality, has brought to light his poetic life-work,—those three thousand Latin hexameter verses, classical in their preservation of the strict quantitative metre of the Augustan age; mediæval in the constant recurrence of rhyme and assonance; learned in their wealth of allusion, sometimes plain, sometimes recondite, but thoroughly scriptural; simple in their sudden bursts of enthusiastic longing, and in the continual reiteration of thoughts whose similarity shows us that the singer is pouring forth "strains of unpremeditated art."

To understand the poem in its entirety, we must understand both the times and the man. But as it is our intention to present here the Latin text and a new English version of only a slight part of the poem, we need not enter upon any lengthy analysis of either the times or the man. We propose to translate merely the cento compiled by Trench from the Cluniac's description of the Heavenly Jerusalem. It was doubtless, as Neale says, to emphasize the miseries of earth that the poet commences his "bitter satire" with a glowing description of heaven. Neale gives this introduction great praise. To quote his words: "As a contrast to the misery and pollution of earth, the poem opens with a description of the peace and glory of heaven, of such rare beauty as not easily to be matched by any mediæval composition on the same subject."

The opening lines of the poem, which we give here as a specimen of the difficulties encountered by the poet in his self-imposed task, do not find a place in the cento of Trench.

guage yields itself so tardily to such restrictions of rhyme and metre that the graceful and painstaking translator, Dr. Neale, found it expedient to depart from his usual course of preserving as far as possible the original metres of the Latin hymns, and adopted an entirely dissimilar metrical form; "because," he explains, "our language, if it could be tortured to any distant resemblance of its rhythm, would utterly fail to give any idea of the majestic sweetness which invests it in the Latin." The Latin, with its long inflectional terminations, its richness in vowel sounds, its peculiar syntactic construction, admitting, with almost equal grace, the direct or the inverted style of phrasing, offers much less of an obstacle to leonine treatment. Nevertheless, to continue such treatment through the Virgilian length of three thousand lines was a task whose completion led Bernard to ascribe his success as much to the help of the Holy Spirit as to the industry and ingenuity of man. In his dedication of the poem to Peter the Venerable he distinctly asserts the necessity of such a help: "Often and of long time I had heard the Bridegroom, but had not listened to Him. saving, 'Thy voice is pleasant in Mine ears.' And again the Beloved cried out, 'Open to Me, My sister.' What then? I arose, that I might open to my Beloved. And I said, 'Lord, to the end that my heart may think, that my pen may write, and that my mouth may set forth Thy praise, pour both into my heart and pen and mouth Thy grace.' And the Lord said, 'Open thy mouth,' which He straightway filled with the spirit of wisdom and understanding; that by one I might speak truly, by the other perspicuously. And I say it in no wise arrogantly, but with all humility, and therefore boldly, that unless that Spirit of Wisdom and Understanding had been with me, and flowed in upon so difficult a metre, I could not have composed so long a work. For that kind of metre, continuous dactylic (except the final trochee or spondee), preserving also, as it does, the Leonine sonorousness, had almost, not to say altogether, grown obsolete through its difficulty; for Hildebert of Laverdin, who, from his immense learning, was first raised to the Episcopate and to the Metropolitan dignity, and Vuichard, Canon of Lyons, excellent versifiers, how little they wrote in this metre is manifest to all."1

Dr. Coles has translated the cento of Trench, with some attempt to imitate, roughly, the rhythmic swing of the original; but the daetyls appear in his version as anapests—"a kind of verse better suited to the genius of English prosody—the daetylic form being seldom used, because less flowing and pleasing to the ear." A juster reason than that of Dr. Coles for the common employment of anapests instead of daetyls in English verse is, we think,

¹ Neale's Preface,

not the reason of pleasure, but of extreme difficulty. A language filled with necessary, but insignificant, particles will not lend itself readily either to trochaic or dactylic treatment. The version of the Doctor-who, by the way, is unwilling to admit Neale's contention that our language is wholly inapt for such metrical treatment as Bernard employs—is flowing and sonorous. been several versions into English, aiming more or less at some similarity with the original metre; but the best, or certainly the best-known and most popular, is the translation, or rather paraphrase, of Dr. Neale—"Hora Novissima," and he departs entirely from the metre of the monk of Cluny! In the face of such facts, we should perhaps offer some apology for the presumption that impels us to attempt another version, and at the same time embarrass our efforts by some slight approach to the metre of the original. We can only plead the intense attractiveness which the song of the Cluniac has exercised over us from the time-many years since—when the Latin lines,

> Urbs Sion aurea, patria lactea, cive decora! Omne cor obruis, omnibus obstruis, et cor et ora,

first filled our soul with their honeyed sweetness. The rhythmic melody has never lost its first charm, and will, even in the rougher strains of English, assert its undoubted prerogative of shaping the ruder verse.

Hic breve vivitur,
Hic breve plangitur,
Hic breve fletur:
Non breve vivere,
Non breve plangere,
Retribuetur.

O retributio!
Stat brevis actio,
Vita perennis;
O retributio!
Caelica mansio
Stat lue plenis;

Quid datur et quibus? Aether egentibus Et cruce dignis; Sidera vermibus Optima sontibus, Astra malignis! A day of dying here,
A day of sighing here,
A day of sorrow:
Ah! but supernal joys,
Yea, God's eternal joys
Wait for the morrow.

O blessed guerdon, Thou!
Brief is the burden now—
The joy ends never!
O blessed burden, Thou
Pledgest the guerdon now,
The rest forever!

To them that nothing own
But sin and stripes alone,
The skies are given!
The stars, to worms of earth;
To slaves, the noblest birth;
To sinners, Heaven!

Sunt modo prœlia, Postmodo praemia; Qualia? plena; Plena refectio, Nullaque passio, Nullaque pœna.

Spe modo vivitur,
Et Syon angitur
A Babylone:
Nunc tribulatio;
Tunc recreatio,
Sceptra, coronae.

Tunc nova gloria
Pectora sobria
Clarificabit,
Solvet enigmata,
Veraque sabbata
Continuabit.

Now must we battle do;
But the reward is true,
In blest completeness:
No sorrow enters there,
No pain nor any care
To dull its sweetness.

Babylon now is great;
Sion of high estate
Sitteth in sadness:
Now we have toil and pain—
Then shall our sceptered reign
Be peace and gladness.

Then shall a glory new
Souls of the Saints endue
With light supernal;
Life's riddles shall it read,
Life's sabbaths make indeed
Sabbaths eternal!

Like Simrock in his Lauda Sion, we have divided each hexameter into three parts; we have done this in order to present both Latin text and English version on the same page—at the risk, however, of making a verse appear trivial which, extending in the original through the sonorous rhythm of the hexameter, was designed to be stately and impressive.

Despite the intricate character of his rhyme and rhythm and quantity, the poet moves with evident ease. Trench notices that "it would be a mistake to regard this singular metre as the exclusive property of Bernard of Morlaix. We have, in Edélestand du Meril's "Poésies Populaires Latines," p. 127, another thirteenth century poem in the same metre and on the same subject. I quote four lines:

O caro debilis, O cito labilis, O male mollis, Quid petis ardua? quid tibi cornua ferrea tollis? Quae modo florida, cras erit horrida, plus loquor, horror; Horror amantibus, horror et hostibus, omnibus horror.

So, too, there is more than one poem by Hildebert in the same." Duffield recalls the hymn to Our Lady written by S. Peter Damian, which has the same form:

"O miseratrix, O dominatrix, praecipe dictu Ne devastemur, ne lapidemur, grandinis ictu."

But these verses do not preserve quantity, and can hardly be com-

pared in difficulty of composition with the metrical labors of Bernard. The work of Theodulus, referred to in this connection by the same author, is a much better illustration: "And, to go back farther still, a certain Theodulus, who lived in the reign of the Emperor Zeno (474-91) wrote a poem of nine hundred lines on Bernard's own theme, De Contemptu Mundi, in the same metre:

Pauper amabilis et venerabilis est benedictus Dives inutilis insatiabilis, est maledictus.

Qui bona negligit et mala deligit intrat abysseum; Nulla pecunia, nulla potentia liberat ipsum."

Liber et hostibus, Et dominantibus Ibit Hebraeus; Liber habebitur Et celebrabitur Hinc jubilaeus.

Patria luminis, Inscia turbinis, Inscia litis, Cive replebitur, Amplificabitur Israëlitis.

Patria splendida,
Terraque florida,
Libera spinis,
Danda fidelibus
Est ibi civibus,
Hic peregrinis.

Tunc erit omnibus Inspicientibus Ora Tonantis, Summa potentia, Plena scientia, Pax pia sanctis:

Pax sine crimine,
Pax sine turbine,
Pax sine rixa,
Meta laboribus,
Atque tumultibus
Anchora fixa.

There Israelites made free
Of all captivity
Shall sound their pæans;
Franchised from woe and dree,
Shall keep a Jubilee
Of endless acons.

Land of the living light,
Land that hath never night,
Nor strife, nor longing:
Lo! in each columned aisle
Israelites without guile
There shall be thronging.

Thornless of any woe,
Thy flowers shall gladly blow,
Land of my dreaming:
To pilgrim hearts afar
Thou art the guiding star
Through the night gleaming.

O on that happy day
When we shall see for aye
The God of Power,
Wisdom beyond increase,
Knowledge and fullest peace
Shall be our dower.

O Peace, O Blessed Peace, Granting to men surcease Of strife and rancor! To weary feet, the goal; To the storm-beaten soul, A goodly anchor! Pars mea Rex meus, In proprio Deus Ipse decore: Visus amabitur, Atque videbitur Auctor in ore.

Tunc Jacob Israel
Et Lia tunc Rachel
Efficietur:
Tunc Syon atria
Pulcraque patria
Perficietur.

My soul her King shall see; God shall her portion be, Ne'er to forsake her: See Him, to love alone; See Him, to know and own Her awful Maker!

O, then shall Jacob be
Israel; and Lia, the
Rachel of story:
Then shall thy bulwarks stand,
Sion, dear Fatherland,
Perfect in glory!

The mediæval mind was saturated with scriptural knowledge. Bernard's verse is only a slight part of the wide and elegant testimony which the literary monuments of the "Dark" ages give of a familiar acquaintance with the *forbidden Book*. One would have thought that Maitland's curious and interesting analysis of the D'Aubigné legend must have settled that question forever. But credulity is in the inverse ratio of knowledge; and so it happens that the phantom of Protestant tradition, laid so often, still walks abroad periodically, not in the favoring shadows of a "Dark Age," but in the blinding glare of the electric light!

The reader will perhaps recall the fund of scriptural allusion in the exquisite dedication of the Cluniac's poem to the Abbot Peter. Chapter and verse are not indicated; that was not an age of "handbooks," and "concordances," and "preacher's manuals," and the rest of the literary paraphernalia with which the modern student of the "Book" finds it so expedient to surround himself. But instead of direct and cumbrous quotations we find delicate hintings and intimations, which, forming the continuous texture of the poet's thought, suppose the readiest and fullest knowledge of the facts and the diction of both Testaments on the part of the reader, just as they manifest a similar knowledge on the part of the writer.

The symbolism which the poet makes use of in the line:

Tunc Jacob Israel, et Lia tunc Rachel efficietur

was well understood by mediæval minds. The strife shall not cease till the morning light of heaven dawns on that life of man which is, as Job puts it, a warfare. Jacob was addressed by the Angel: "Let me go, for it is break of day." He answered: "I will not let thee go except thou bless me." Jacob prevails, and in sign of his reward, receives the new name of Israel. Possibly the poet had also in mind the beautiful but incorrect interpretation of St.

Augustine, Hilarius, Eusebius, and others, who made Israel is ro el, vir videns Deum. The "true Israelite" shall be another Jacob. become in heaven, "Israel," "seeing God" in the beatific vision. The contrast between the sorrows and tears of our earthly exile and the abiding peace and sweet contemplation of the Fatherland is further insisted upon in the reference to Lia and Rachel: "Nam sicut Rachelis est intelligere, meditari, contemplari: sic profecto pertinet ad Liam flere, gemere, suspirare," as Richard of St. Victor interprets symbolically in De Duodec, Patriarch. The monk of Cluny would see in Rachel the eternal realization of the tropological interpretation of the names of Lia and Rachel, current in the Middle Ages. They signified respectively the active and the contemplative life. St. Bernard, in his work, "De Bene Viv. . . . ," draws the comparison between the two very fully, saying, amongst other things, of the contemplative soul: "Ita ut jam nihil agere libeat, sed despectis omnibus curis saeculi, ad videndum faciem sui Creatoris animus inardescat: ita ut jam noverit carnis corruptibilis pondus cum mœrore portare, totisque desideriis optare hymnidicis angelorum choris interesse, appetere admisceri coelestibus civibus, de aeterna incorruptione in conspectu Dei gaudere." The monk of Clairvaux sees in Rachel the soul that is longing "in conspectu Dei gaudere"; the monk of Cluny would read in her name the symbolism, not so much of promise, as of happy fulfillment:

> Tunc Syon atria Pulcraque patria Perficietur.

O bona patria, Lumina sobria Te speculantur; Ad tua nomina Sobria lumina Collacrimantur:

Est tua mentio Pectoris unctio, Cura doloris, Concipientibus Aethera mentibus Ignis amoris.

Tu locus unicus, Illeque caelicus Es paradisus; Non ibi lacrima, Sed placidissima Gaudia, risus. Yet doth the brimming eye
See in thy peaceful sky
A tempered gladness:
Yet is thy sweet name fain
Flood gates to ope amain
Of soothing sadness!

Nathless 'tis healing balm!
To the tossed soul, a calm
'Midst evils thronging:
To hearts that soar above,
A flaming tongue of love—
Of love and longing!

Fairer than Eden lies
The heavenly Paradise
Of the hereafter:
Tears may not dim the eye—
Lo! the o'erarching sky
Echoes with laughter!

Est ibi consita

Laurus, et insita

Cedrus hysopo;

Sunt radiantia

Jaspide moenia,

Clara pyropo;

Hinc tibi sardius,
Inde topazius,
Hinc amethystus;
Est tua fabrica
Concio cælica,
Gemmaque Christus.

Tu sine littore,
Tu sine tempore,
Fons, modo rivus,
Dulce bonis sapis,
Estque tibi lapis
Undique vivus.

Est tibi laurea,
Dos datur aurea,
Sponsa decora,
Primaque Principis
Oscula suscipis,
Inspicis ora:

Candida lilia,
Viva monilia
Sunt tibi, Sponsa,
Agnus adest tibi,
Sponsus adest tibi,
Lux speciosa:

Tota negotia, Cantica dulcia Dulce tonare, Tam mala debita,

Quam bona præbita Conjubilare.

Urbs Syon aurea,
Patria lactea
Cive decora,
Omne cor obruis,
Omnibus obstruis,
Et cor et ora.

Laurels are in thy land;
Solemn thy cedars stand
With fragrance flowing:
No eye hath e'er beheld
Jasper or emerald
Like to thine glowing;

Nor ruddy sardius,
Nor topaz splendorous,
Amethyst gory:
Builded of Saints alone,
Christ is thy corner-stone,
Thy gem and glory!

Silent and shoreless sea!

Day of eternity!

Upspringing fountain!

Builded of living stone,

Goodness is thine alone,

Sion's glad mountain!

In thee the Saviour finds
Beauty! with laurel binds
Thy sunlit tresses,
Spouse of His loving grace,
Who gazest on His face,
Fed with caresses!

Lilies of dazzling white,
Gems of serenest light
Gleam for thy pleasure:
Ah! but the Lamb is thine:
He is thy Spouse Divine,
Thy dearest treasure!

Sing, then, an endless song;
Let the full strophes long
Tell the high story—
How in thy low estate,
Thy God hath given thee great,
Exceeding glory!

Golden thy bulwarks shine; Honey and milk are thine, Sion the Blessed! Longing for thy sweet joys, The fainting heart and voice Sink all oppressed! Nescio, nescio,
Quae jubilatio,
Lux tibi qualis,
Quam socialia
Gaudia, gloria
Quam specialis:

Laude stndens ea
Tollere, mens mea
Victa fatiscit:
O bona gloria,
Vincor; in omnia
Laus tua vicit.

Sunt Syon atria
Conjubilantia,
Martyre plena,
Cive micantia,
Principe stantia,
Luce serena:

Est ibi pascua,
Mitibus afflua,
Præstita sanctis;
Regis ibi thronus,
Agminis et sonus
Est epulantis.

Ah me! I cannot know
What is thy mystic glow,
Thy jubilation,
Thy storms of heavenly noise,
Thy tender social joys,
Thy gloriation.

The brush that painteth you, Sion's celestial hue, Drearily painteth: My song should be unsung: For oh! my trembling tongue Wearily fainteth.

Jubilant are thy halls;
And all thy golden walls
Shout the glad story:
Thine is the martyrs' throng;
The Prince his court among
The gleam and glory.

There is the light serene;
There are the pastures green;
There is no sadness:
There is the kingly throne;
There can be heard alone
Feasting and gladness!

The stanzas beginning with that overflow of melodic sweetness, "Urbs Syon aurea," etc., will be forever linked, no doubt, with their most genuine version in English, the "Jerusalem the Golden" of Rev. Dr. Neale. "This scholar of Cambridge, and this monk of Cluny, have given to the religious world the sweetest and dearest poem that our language contains,"-thus, Judge Noyes, in "Seven Great Hymns." He even goes so far as to assert that The Celestial Country is better than De Contemptu Mundi,-very enthusiastic praise of a version which Dr. Coles finds occasional fault with. Still, the present writer wishes to record his admiration and praise -no less sincere, if not quite so enthusiastic-of that version. For, indeed, although differing wholly in metre, both poets have shown their mastery of "the art of arts," and, under an exquisitely simple garb of expression, concealed their art. The merit of Dr. Neale's translation was early recognized. In the third edition of "Mediæval Hymns," published in 1867, he expresses his "gratitude to God for the favor He has given some of the centos made from the poem, but especially Jerusalem the Golden. It has found a place in some twenty hymnals; and, for the last two years, it has hardly been possible to read any newspaper which gives prominence to ecclesiastical news, without seeing its employment chronicled at some dedication or other festival. It is also a great favorite with Dissenters, and has obtained admission in Roman Catholic services." (Page 70.)

Gens duce splendida, Concio candida Vestibus albis Sunt sine fletibus In Syon aedibus, Ædibus almis;

Sunt sine crimine, Sunt sine turbine, Sunt sine lite In Syon aedibus Editioribus Israëlitae.

Urbs Syon inclyta, Gloria debita Glorificandis, Tu bona visibus Interioribus Intima pandis.

Intima lumina,
Mentis acumina
Te speculantur;
Pectora flammea
Spe modo, postea
Sorte lucrantur.

Urbs Syon unica,
Mansio mystica,
Condita coelo,
Nunc tibi gaudeo,
Nunc mihi lugeo,
Tristor, anhelo:
vol. xviii.—52

There, clad in raiment white,
The Prince's radiance bright
His people borrow:
O never, nevermore,
Shall sighs of sadness pour
Or tears of sorrow.

No care nor any sin

Can ever enter in,

No strife of passion:

In Sion's livery dight

Stands the true Israelite

Whom Christ doth fashion.

Noble Jerusalem!
Glory and crown of them
Who thee inherit!
Thy hidden beauty lies
Plain to the inner eyes
Of the rapt spirit.

As thy recess unfolds,
The eye of Faith beholds
Thine utter treasure:
Me then shall hope sustain
Till the clear sight may gain
All without measure.

Thy mystic halls, Sion,
Thine only walls lie on
Heaven's foundations.
How my heart panteth for,
Longeth and fainteth for
Thy consolations!

Te qui corpore
Non queo, pectore
Saepe penetro,
Sed caro terrea,
Terraque carnea,
Mox cado retro.

Nemo retexere
Nemoque promere
Sustinet ore,
Quo tua mænia,
Quo capitalia
Plena decore:

Opprimit omne cor
Ille tuus decor,
O Syon, O pax;
Urbs sine tempore,
Nulla potest fore
Laus tibi mendax.

If flesh soar not so high,
Let then the inner eye
Oft see the vision!
Alas! poor flesh and earth
Falleth soon, nothing worth
Such bliss Elysian!

No tongue may long retain
The sweetness of the strain
Thy beauty praising—
How thy walls lofty climb,
Their pillared heads sublime
In triumph raising!

O dear Jerusalem,
Thy peace oppresseth them
Fain to salute thee:
No tongue can offer thee
Praises enough for thee,
City of Beauty!

How the "heavenly home-sickness," as Trench beautifully calls it, breathes through these lines with most pathetic accent! "Nunc tibi lugeo, tristor, anhelo," is an echo of the Royal Psalmist's "my soul longeth and fainteth for the courts of the Lord." Trench recalls the exquisite ode of Casimir, "the great Latin poet of Poland," the Jesuit whose limpid verse attains even to the Horatian fount of poetic thought and expression. "Urit me patriae decor" has been Englished very successfully by Isaac Watts, and still better by Dr. Neale:

"It kindles all my soul,
My Country's loveliness"...

George Herbert's Come, Lord, my heart is sick; Coffin's Moraris heu! nimis diu; Faber's O Paradise, O Paradise, who doth not crave thy rest? Bonar's The home-sickness, are all repetitions of the Cluniac's groaning and sighing, and of that elder cry of the Beloved Disciple and Apostle of Love: "Come, Lord Jesus!" (Apoc., xxii., 20).

O sine luxibus,
O sine luctibus,
O sine lite,
Splendida curia,
Florida patria,
Patria vitae!

No din is at thy gate,
No lust nor any hate,
Nor sordid striving;
Splendid thy temples stand,
Flowery Fatherland,
Land of the living!

Urbs Syon inclyta,
Turris et edita
Littore tuto,
Te peto, te colo,
Te flagro, te volo,
Canto, saluto.

Nec meritis peto,
Nam meritis meto
Morte perire;
Nec reticens tego
Quod meritis ego
Filius irae:

Vita quidem mea, Vita nimis rea, Mortua vita, Quippe reatibus Exitialibus Obruta, trita.

Spe tamen ambulo,
Praemia postulo
Speque fideque;
Illa perennia
Postulo præmia
Nocte dieque.

Me Pater optimus
Atque piisimus
Ille creavit;
In lue pertulit,
Ex lue sustulit,
A lue lavit.

Gratia cælica
Sustinet unica
Totius orbis
Parcere sordibus,
Interioribus
Unctio morbis:

Diluit omnia
Cælica gratia,
Fons David undans
Omnia diluit,
Omnibus affluit,
Onnia mundans:

Sion, on thy fair shore
Are hushed forevermore
Sea-beats of sadness:
Thee I seek, Thee I sing,
Thee I wish, Thee I bring
Greetings of gladness!

Not as though meriting—
Oh! disinheriting
Is my just measure:
For I cannot conceal
That I should only feel
Heaven's displeasure!

Life, thou hast been to me Guiltiness, sin to me;
Dying, not living!
Waste with the weariness,
Dark with the dreariness
Of thine own giving.

Yet do I walk in trust,
Joyances of the Just
Humbly imploring;
Prayers for Eternal Rest,
From this o'ercharged breast
Day and night pouring!

For the Almighty God
Fashioned my earthly clod,
Made me and blest me:
In my shame patiently
Bore with me, lifted me,
Washed me, caressed me!

And his unwearied grace
Seeketh in every place
To grant aneling,
To wash our stains away,
And all our pains allay
With balsam healing.

The fount of David flows
To lessen all our woes,
And all affliction;
To soothe our every smart,
To fill the empty heart
With benediction.

O pia gratia,
Celsa palatia
Cernere praesta,
Ut videam bona,
Festaque consona,
Cælica festa.

O mea, spes mea, Tu Syon aurea,

Clarior auro, Agmine splendida, Stans duce, florida Perpete lauro;

O bona patria,
Num tua gaudia
Teque videbo?
O bona patria,
Num tua præmia
Plena tenebo?

Dic mihi, flagito,
Verbaque reddito,
Dicque, Videbis!
Spem solidam gero;
Remne tenens ero?
Dic, Retinebis!

O sacer, O pius,
O ter et amplius
Ille beatus,
Cui sua pars Deus:
O miser, O reus,
Hac viduatus!

Grant then, sweet Grace, that I
Dwell soon in mansions high,
Far from all sadness;
O then this rapt heart shall
Prolong the carnival
In festive gladness.

Sion, thou Hope of mine!
Than gold more bright doth
shine
Thy light supernal;
Thy hosts in beauty rare
The twining laurel wear

Fatherland! shall I see
What joys are waiting me,
Safe in thy portal?
Shall I securely hold
Thy royal crown of gold
In life immortal?

Springing eternal.

Here at thy tender feet,
Say to me, Jesu sweet,
"Yea, thou shalt see it;"
Be this my hope and stay!
Shall it e'er fade away?
Bid me not dree it!

O rich in happiness
Whom Jesus thus shall bless!
Thrice and thrice blessed!
But oh! what hope of bliss
For the poor wretch of this
One dispossessed!

These verses of Bernard form the cento made by Trench. They do not represent a continuous part of the original, but have been selected here and there with a view to beauty and consecutiveness of thought. For not all of the original maintains the same high standard of diction and graceful imagery. One of the defects in the poem, noted by Trench, is "its want of progress. The poet, instead of advancing, eddies round and round his subject, recurring again and again to that which he seemed to have thoroughly treated and dismissed." He therefore "mitigated" the defect "by

some prudent omissions." Neale's love for the theme and the treatment alike urged him to give a second translation of much greater extent than his first (which was a version of the larger part of Trench's cento), not always with equal fidelity of choice and elegance of rendering. While acknowledging that Trench's selection was "very beautiful," he nevertheless thought it "a mere patchwork—much being transposed as well as cancelled: so that the editor's own admission that he has adopted 'some prudent omissions,' would scarcely give a fair idea of the liberties which have been taken with it." As the fuller cento of Rev. Dr. Neale has been widely diffused amongst the lovers of hymns both in the Mediæval Hymns and in Seven Great Hymns, it may be interesting to record here the opinion of Dr. Coles, a Newark physician of cultured taste and elegant literary bent, who comments as follows on the larger work: "Whether by this process there was not as much lost as gained admits of some doubt. It set aside Trench's labor of love as impertinent or useless. The matter of the earlier translation, with which many had become familiar, could only be found by diligent search, disjecta membra poetae, scattered everywhere up and down the later work. One, however, might become reconciled to this, provided improvement always followed; but we think this can hardly be claimed. On the contrary, what is added too often appears crude, or incongruous, or out of place, or of inferior interest. For example, we read:

Here is the warlike trumpet,
There, life set free from sin,
When to the last Great Supper
The faithful shall come in;
When the heavenly net is laden
With fishes many and great,
(So glorious is its fulness
And so involate),

Without access to the original, it would be impossible to say which is responsible, the author or the translator, for the strange groupings contained in the following verses:

Jesus the Gem of Beauty,
True God and Man, they sing,
The never-failing Garden,
The ever-golden Ring,
The Door, the Pledge, the Husband,
The Guardian of the Court,
The Day-Star of Salvation,
The Porter and the Port,

What better is this than a distracting medley of names, whose meaning and fitness, so far from being immediately obvious, it is

hard to discover even with time and study. Certainly, one needs to possess a rare nimbleness of fancy to qualify him to overleap such wide spaces as intervene between 'the never-failing Garden' and the 'ever-golden Ring,' thence on from 'the Door, the Pledge, the Husband,' to the distant and final resting-place, 'the Porter and the Port' (whatever these may be), without longer pauses in the transition than the punctuation calls for. The framer of the Cento did well, therefore, we think, in leaving out lines like these, and no advantage has resulted from their restoration" ("Old Gems in New Settings," second edition).

All of those whose opinion concerning the merit of the original has fallen under our eye, seem to unite in a single chorus of praise—not of the whole poem, but of that introductory part which we are now considering, variously entitled by its Englished versions, "The Better Country," "Hora Novissima," "Laus Patriae Coelestis," "The Celestial Country," etc. Thus, for example, Neale. "I have no hesitation in saying that I look on these verses of Bernard as the most lovely, in the same way that the *Dies Iræ* is the most sublime, and the *Stabat Mater* the most pathetic, of medieval poems. They are even superior to that glorious hymn on the same subject, the *De Gloria et gaudiis Paradisi* of St. Peter Damiani."

So, too, Coles thinks that "it possesses the elements of genuine power—has indeed that imperishable principle of lyric life which fits it to be the interpreter of the human heart in all ages, in the nineteenth century no less than the twelfth." Duffield says: "In the twelfth century—the time of the great crusade—we find the noblest and purest of Latin hymns. It is the age of Hildebert, Abelard, Bernard of Clairvaux, Peter of Cluny, and Adam of St. Victor. But among them all I find no one who has inspired a deeper and more lovely desire for the heavenly land than Bernard of Cluny." Trench thinks that "no one with a sense for the true passion of poetry, even when it manifests itself in forms the least to his liking, will deny the breath of a real inspiration to the author of these dactylic hexameters." Schaff says: "This glowing description of the celestial country is the sweetest of all the New Jerusalem hymns of heavenly home-sickness, which have taken their inspiration from the last two chapters of Revelation." Julian calls it a "magnificent poem"; and Wrangham says that "De Contemptu Mundi remains as an imperishable monument of an author of whom we know little besides his name, and that a name over-shadowed in his own day and in ours by his more illust jous contemporary and namesake, the saintly Abbot of Clairvaux."

Without desiring to sound a discordant note in the midst of such a harmonious chorus, and without attempting to lessen the

real excellence of Bernard's muse, we may be permitted to question whether that excellence is the sole inspiration of all this chorussing. The fact is that Bernard's poem has been made to contribute some of its verses to that work of Flacius Illyricus which his zealous hatred of the "Church of Rome" urged him to compile, the "Catalogus Testium Veritatis." The text of this work of the Lutheran zealot contains eighty-five lines of the poem, while the whole was published in the "Varia doctorum piorumque Virorum de Corrupto Ecclesiae Statu Poemata," a supplement to the "Catalogus." "Flacius was an unwearied searcher of the libraries of Europe for material to use on the Lutheran side of the great controversy"...." it was the part Trench passed by for which Matthias Flacius Illyricus, its first editor, cared the most" (Duffield). Flacius seems to have been so very zealous in editing his "Catalogue of Witnesses for the Truth," as to have ranged himself somewhat questionably on her side. Peter the Venerable is found in his work as an accuser against "Rome!" Maitland, in "The Dark Ages," prints the whole of the letter of Peter the Venerable to the Pope, from which Flacius extracts a few lines, while leaving unnoticed the professions of love, obedience, respect for the Supreme Pontiff, with which the letter abounds. The passage he extracts is, in the context, an encomium of the Carthusians, but on it Flacius builds a curiously inferential argument. It is simply amazing how a man who was even "one of the most fiercely zealous, not to say ferocious, of the Protestant party in the sixteenth century," as the Anglican Maitland describes him, could have found any comfort in any part of this long Epistle of Peter's. It commences: "To the supreme Pontiff, and our special Father, the Lord Pope Eugenius, Brother Peter, the lowly Abbot of the brethren of Clugni, sends devout obedience with sincere affection"; goes on to speak of his high office "over the nations and over kingdoms," etc., employing, towards the close, the expression majestati vestrae. "Was the person who was thus writing to the Pope . . . , a witness against the Romish Antichrist?" asks Maitland, in evident disgust.

In this long digression we have not forgotten Bernard, the disciple of this venerable abbot of Cluny. His poem, of which "the greater part is a bitter satire on the fearful corruptions of the age" (says Neale), must not be looked at with an eye that is ready to see but the dark side of a picture. An age which could produce a St. Norbert, a St. Bernard, a Peter the Venerable, the many holy and sweet singers of godly things who were contemporaries of our Bernard who sang so ecstatically of heaven; a half-century which saw the foundations laid of the Order of Premonstratensians and the wonderful Order, too, of the Cistercians; which produced a

Peter Lombard, a Hugh of St. Victor, a Eugenius III.—these years, just preceding the probable composition of the *De Contemptu Mundi*, could not have been wholly evil.

The fact is, that a fair estimate of an age can never be gleaned from, we shall not say a poetic sature, but even from a prose philippic. The eye of a Flacius, which by some peculiar religious strabismus could find grains of Protestant metal in the golden fashioning of him whose own age styled him "Venerable," this kind of an eye could read wholesale condemnation, doubtless, in the work of Bernard of Cluny. Nevertheless, it was an evil time, not alone to the poet's soul—made sensitive to every shade of evil by the bright purity and peace of his life and calling—but even to the duller senses of this age of impiety. For the Church was a prey to the evils consequent on irreligious state-craft, the haughty claims of Cæsarism, and the ambition of worldly-minded prelates. When, indeed, shall the millennium of freedom from such evils come to the Spouse of Christ? In all times

"Syon angitur a Babylone."

And in all times will she protest against such evils with the most zealous of the "reformers," as she has protested against them in the past, as she protested against and legislated against them even in the life-time of our Bernard, in the Ninth Œcumenical Council (1123). Shall we condemn an institution which thus sets its face sternly, however impotently, against all corruption? Evil times there were and evil men; but the Holy Spouse of Christ, fretted to the soul in their midst, is not amenable to the judgments passed against those whom she herself condemned.

At best, the argument of cvils is a poor one, unless exhaustive and fairly stated. With horror did the piety of the Middle Ages record what our age is too willing to accept without such shuddering comment. But who thought of chronicling the endless and widespread, but quiet and unobtrusive, piety of those ages of Faith?

"The evil that men do lives after them;
The good is oft interred with their bones,"

If some Flacius were to make a digest of all the wickedness chronicled—not in several centuries of our reformed age, but in the newspaper literature of a single day, and should hand such a volume down to posterity as a picture of the times we live in, we certainly should not figure as an age when justice, purity, honesty, piety, were very highly prized. But who—except the Recording Angel—is even now setting down the details of many a "life hidden with Christ in God?"

We have been betrayed into a longer excursion than we had intended to allow ourselves in this matter. But our Cluniac has been made to perform a service which we must believe to have been wholly foreign to his purpose in the composition of his "bitter satire." Because he inveighed against times which produced an anti-pope, and an Arnold of Brescia, and in the midst of such disturbing influences, produced also simoniacal abuses, we know that his eye could not be closed to the piety of his brethren, and to the efforts made by the Church to correct the evil influences and customs of the age.

Our fragmentary account of Bernard and his song would be incomplete without some notice of the hexameters composed by him as a sort of introduction or prelude to his greater work. In them he employs still the strict quantitative prosody of the classical metre, but employs a different scheme of assonance and rhyme from that which we have been considering, e.g.:

"Chartula nostra tibi" mandat dilecte salutes,
Plura vides ibi si || modo non mea dona refutes,
Dulcia sunt animae || solatia quae tibi mando;
Sed prosunt minime || si non serves operando.
Quae mea verba monent || tu noli tradere vento
Cordis in aure sonent || et sic retinere memento,
Ut tibi grande bonum || nostri monitus operentur,
Perque dei donum || tibi caelica regna parentur."

The corresponding parts of each couplet rhyme—the linear caesura indicating the place of the first rhyming syllables. We reproduce the scheme of rhyming in English:

"Greeting to thee it giveth, Friend, this script that I offer:
Much of good in it liveth, for whoso takes what I proffer.
Counsels sweet to the spirit, the soul to happiness wooing:
Yct shall they nothing merit till hearing be followed by doing.
Take these comforts endearing nor cast to the scattering breezes;
But in the heart give hearing while memory faithfully seizes.
Then by my words the graces and gifts of God shall be given,
Winning in earthly places the crown of the Kingdom of Heaven."

The rhyme then varies in another way—the hemistichs of each verse becoming the rhyming pairs:

"Menti sincerae possunt haec verba placere
Haeciter ostendunt, hostantur, non reprehendunt.
Words they are that shall dearly please who heareth sincerely;
Show they the beauty abiding—gently winning, not chiding!"

And he seeks to show the "beauty abiding" in contrast with the evils and woes that encompass the wicked; for while

"His qui salvantur semper bona multa parantur, Sic mala multa malis properat mors exitialis,"

The good shall rejoice, the evil shall weep, forever:

"Isti gaudebunt, isti sine fine dolebunt,
Nemo potest fari nec scribere nec meditari
Gaudia justorum, nec non tormenta malorum.
Heu male fraudatur, vah! stulte ludificatur,
Qui propter florem mundi, vanumque decorem,
Qui prius apparet flos, et protinus aret,
Vadit ad infernum perdens diadema supernum,
Quod dominus donat cunctis quos ipse coronat."

"These shall dwell in gladness, but those forever in sadness;
Never can tongue express it, nor pen,—yea, mind cannot guess it,
Heaven's bright glory, Hell's unending, pitiful story.
Blind in the world's dark fashion, vah! foolish plaything of passion

Who for an earthly flower—the empty joy of an hour, Which to-day is woven, to-morrow cast into the oven—Gaineth but pains eternal, loseth beauty supernal Unto the faithful given by Him who crowneth in Heaven."

The poet is more felicitous in the more difficult verse. Far from being embarrassed by it, he seems to catch from its accumulated intricacies greater zest and larger freedom and tenderer inspiration. But, doubtless, it is the theme that inspires him, as it has inspired so many longing hearts. For, with Lowell, "Who hath not been a poet" at some fugitive moment of world-quiet? and who has not felt with Coleridge, that

"In some hour of solemn jubilee
The massy gates of Paradise are thrown
Wide open, and come forth in fragments wild,
Sweet echoes of unearthly melodies—
And odors snatched from beds of amaranth,
And dews that from the crystal river of Life
Spring up on freshened wing, ambrosial gales!
The favored good man in his lonely walk
Perceives them, and his silent spirit drinks
Strange bliss, which he shall recognize in Heaven,"

HUGH T. HENRY.

REUNION OR SUBMISSION.

HAT is meant by "a reunion of the Churches?" The phrase is, perhaps, purposely indefinite. There cannot be reunion where there never was union; and it is certain that between Catholicity and Heresy there never was union of faith or obedience. Let us examine into the fiction "reunion," and see whether we can discover a better word.

The High Church party in England, when they advocate reunion, mean the union of "the Roman, Greek and Anglican Branches" of what they account the whole Catholic Church. To a Catholic it is obvious that such a union would be, theoretically and practically, impossible. First, there is the assumption that the three Branches, so called, were at one time united as one whole. But there never was, never could be, such a union. Czarodoxy and Anglicanism—two "Branches" out of the three—are bitterly opposed in principle to Catholicity, and cannot, therefore, be derived from her maternity. Czarodoxy is a revolt against the authority of the Holy See, while Anglicanism, in addition to being such a revolt, is an apostacy from a great part of the Catholic faith; nor does Czarodoxy recognize the orthodoxy of the Church of England, or regard its Orders as derived from the Apostles. It is obvious, therefore, that there cannot be a reunion of "Branches" which never were united, just as it is obvious that the Catholic Church, which was never Czarodox or Anglican, cannot be reunited to "Branches" it never recognized. The phrase, therefore, "reunion of the Churches," has no meaning, accurately speaking, in High Church sense; while, in Low Church sense, the phrase means the union of all Dissenters with an Establishment which has never owned them as her children. Some better word, some more accurate word, than reunion must be found to meet the difficulties of the case. And that better word, that more accurate word is Submission—submission of all Protestants to the Catholic Church.

"No," will exclaim both Anglic ins and Dissenters, "Submission is too humiliating an idea." Humiliating it is, if taken in a wrong sense, but cheering and elevating in a right sense. There cannot be humiliation in the submitting to an authority which we recognize as rightful and legitimate. It is in submitting to an authority which we do not recognize that there is a sense of affront to our self-respect. For example, is there anything humiliating in obedience to our parents, or in obedience to the laws of our country,

or even in obedience to such rulers of any society as are formulated for the order of its members? None whatever And why not in any one of the three cases? Simply because parental authority is recognized as legitimate, equally in a human and divine sense; because the laws of a country are as essential to our protection as they are essential to the very existence of a state; and because the social rules of any society are as much a safeguard to its members as they are a fortress beyond which outsiders cannot penetrate. There is no humiliation in such submission. On the contrary, humiliation would follow quickly on disobedience to parents, on the infraction of any one of a nation's laws, or even on the ostracism to which the breaking of a society's rules would expose every non-conforming member. It is not then submission. in each one of these three instances, which involves the dreaded punishment of humiliation; it is the refusal to submit obediently to properly constituted authority which alone merits the penalty and the shame.

The non-Catholic will here object to us very reasonably: "Yes, perfectly true as to an authority which is recognized; but how do you show that submission to the Catholic Church stands on the same level with the examples you have given? I must affirm that it does not, because, whereas in your three examples we recognize the authority, we do not recognize authority in the Roman Church. Hence you are simply begging the question."

Now our reply to this objection will be as follows: The assertion of authority is a primary cause of obedience, because assertion implies a conscious right. In almost all human matters the assertion of authority is three-fourths of the vindication of its claim. If a parent said to a son, "do not obey me," or if the state said to a subject, "do not obey me," there would be very little obedience in either case. But because the parent says, emphatically, "you must obey me," and because the state says, emphatically, "you must obey me," there is positively no questioning of an authority of which the assertion implies the right to be obeyed. And the analogy is so close—we do not say it is complete—between the Catholic Church, the parent, and the state that we shall be able to show in a few minutes that the assertion of divine authority is in itself a vindication of its right.

We begin by observing that the Catholic Church is the only Church which makes the assertion of its own divine authority,—that is of the divine right to be obeyed. It can be proved, beyond the possibility of questioning, that no other church, sect, denomination—from the Czar's Church down to the minutest Christian body—ever did claim, or does now claim, to have sole divine authority to command obedience from all Christians in the world.

The Czar's Church is so far from making this assertion that it confesses itself to be a purely political machine for the working out of the unity of the empire, nor has it ever tried, outside that empire, to convert the heathen to Christianity, nor has it ever exhibited the smallest interest in their conversion. Christian missions have had no patronage from the Russian Czar. Persecution is the sole mission-work of the whole empire. And this one fact by itself would prove that the Russian Church makes no assertion of the divine authority to teach the world. But, more than this, the Czar's Church does not pretend to define dogma; it has never dreamed of summoning councils to rule the faith; it is an absolutely dead body in the sense of that development which is the sure sign of life in the teaching Church. The Russian "Holy Synod" is a mere sham, with no pretension to dogmatize on Christian doctrine in response to the attacks of unbelievers. Indeed. schism has so utterly dried up the Russian "Branch"—has so withered its spiritual vitality throughout the empire-that it would be true to say that in shivered Protestantism there is more of the old Catholic spirit than in that Communion of which Photius was the beginner.

And as to the Church of England, she affirms emphatically that she cannot teach; that, as "all churches have erred," so can she err; and she is so wrath with the Catholic Church for proclaiming her infallibility—for defining its exact limits, and where it resides—that she cannot forgive her such a formal censure of Anglican humanness, of Anglican vacillation and fallibility.

As to Dissenters, it suffices to make the remark that the very existence of their varieties is the proclamation of the rights of heresy, of the Christian privilege, the Christian duty, of infinite schism.

There is then only one Christian body in the world which asserts her divine authority to teach all nations; and though the assertion, in itself, would not prove possession, yet it creates a strong presumption in its favor. Just as, to return to our analogy, no one would think of obeying a parent who should say, "I have no authority from God or man to presume to teach you"; nor would any one think of obeying the laws of a state which should say, "Pray, make your own laws for yourselves, for I have no authority to command any compliance, or to punish any political heretic or schismatic;" so no one who believed in the divinity of the Christian religion should think of obeying the Czar's religion or Queen Victoria's religion (or the religion of any one of the 242 English sects, or the religion of any one of the 220 American sects), since every one of these religious bodies acknowledges that it has no

more authority than self-will and self-pleasing can confer upon it. And since the authority of a divine Teacher is not only to make laws, but to rule the whole faith which concerns salvation, that authority must demand an obedience more intellectual and more moral, more binding upon the spiritual nature of every Christian, than all the authorities of parents and states put together, which only busy themselves with the philosophy of temporal life.

If we should allow, then, the thorough reasonableness of the objection, "The mere assertion of divine authority, apart from other credentials, does not amount to proof positive of its possession," we should nevertheless be able to demonstrate that the disclaimer of divine authority is proof positive that it cannot be possessed. "I cannot teach you, because I am as fallible as you are," is the same thing with saying, "I have no divine authority, any more than have the lay members of my Communion." And this is what all the "churches." save only the Catholic Church, say to their co-authoritative disciples. All the "churches," therefore, save only the Catholic Church, confess that they are purely human institutions; their "theology" is constructed out of the private opinions of individuals, who take themselves for their sole guides in determining truth. They even glory in what they call their "liberty of private judgment," the liberty of being the slaves of their own electicism. Their "authority" is their private estimate of one or more Protestant teachers, or of the comparative worth of their own views upon all doctrines. In other words, they have no authority at all. To call a man's own estimate of an individual teacher, or a man's own estimate of his interpretation of the Scriptures "a divine authority which is all-sufficient and reliable," is to make a jest of the most important question to the human soul. Yet this is the one only "divine" authority which any person can possess outside the Church. It matters not whether a man be Orthodox or Anglican, whether he be a Baptist or a Quaker; his only "divine" authority is his private judgment of his teachers, or his private judgment of the whole teaching of the New Testament.

Nor is it worth while to linger on this last point—"the private judgment of the whole teaching of the New Testament." No fallacy has done more harm to Christian souls than that fallacy which has been the staple of all Protestantism: "the private interpretation of the Bible is the same thing with the Bible itself." Common sense might have sufficed to explode a theory which is the deification of ignorance and presumption. To talk of the Bible as being "the sole divine authority," apart from the divine interpretation of the Bible, is like asserting of astronomy that it

can be perfectly apprehended by gazing upon the heavens on a star-lit night. The fallacy of so-called Bible Christianity has been demonstrated by every sect that has been started, and by every disciple of every sect new or old. That fallacy should be too worn out to need discussion. Divine authority *does* reside in the Bible, but not in the private interpretation of the Bible.

II.

That "The disclaimer of Divine Authority by all the sects is proof positive that not one of them can possess it," we may take to be a sort of Christian postulate. Where one Church, and only one, says "I can teach because I possess divine authority"; and where all the other churches, sects, denominations, say " I cannot teach because I have no divine authority," we see the hopelessness of "re-uniting" what was never united, what always was, always must be, antagonistic. Yet not more inaccurate is the popular word "reunion" than is the popular word "churches" in Protestant sense. There cannot be "churches." In the sense used in the New Testament, and in the sense used by Catholic nations, we may speak of "The Church in Italy," "The Church in France"; but the word so used, so far from meaning different Churches, means national parts of one and the same Catholic Church. The sense in which non-Catholics use the word—as when they say the Greek Church, or the Anglican Church—is the sense of perfectly distinct, inimical bodies; having some doctrines in common, but no authority in common, indeed protesting against each other's assumed authority. In this sense there cannot be churches. If there could be, there could be also Christianities; and therefore, it would follow, there could be Christs. One God, one faith, one baptism, imply necessarily one Catholic Church -one in Divine authority, and therefore one in Divine faith; one in allegiance, devotion and sentiment. So that when men talk of reunion of the churches, they use a phrase which is painfully inaccurate. There never was but one Church; all schismatics, all heretics being outside that one Church—unless they are baptized and in good faith. In this latter case, though they would be outside the Visible Church, yet they would be, spiritually, its members; for all baptized Christians are baptized into the Roman Church, and remain inside till they put themselves outside. The High Church idea about being "baptized into the Anglican faith" is transparently absurd and even impious; for it presupposes that Almighty God will care to please all Protestant parents by baptizing their children into the parental faith. In this case it would be the parents—it would not be Almighty God—who would decide upon the faith given in baptism. The natural reason suffices to tell us that, if there be one Sacrament of Baptism, that Sacrament must be the same for all the baptized; every child must be baptized into the same faith; so that if one child be baptized into the Anglican faith, all children must be baptized into the Anglian faith; or if one child be baptized into the Roman faith, all children must be baptized into the Roman faith. The non-Catholic idea of adapting a Divine Sacrament to the private views of every member of every sect is so fantastic that it can scarcely be treated gravely. That a parent should choose a special baptism for his own child-choose the faith "into which he should be baptized "-is putting the parent into the place of Almighty God. Yet it is the commonest thing in England to hear people use such expressions as "baptized into the Protestant faith," or "baptized into the faith of the Greek Church." To a Catholic, who apprehends that the Divine unity does not admit of such painfully human variableness, such expressions are irreverent—they are shocking.

As then there is one baptism into one faith—not a hundred different baptisms into a hundred faiths—it must follow that he who (wilfully) quits the one faith is no longer a Catholic but a heretic. Happily the immense majority of those who are born out of the Visible Church are not heretics, but are only in "heresy"; and the majority being baptised they remain members of the Catholic Church until they wilfully place themselves outside it. Of all baptized Protestants it would therefore be true to say that they could be "reunited" to the Catholic Roman Church; but this is very different from saying that the heresy which they may have cherished can be re-united to the Catholic Roman Faith. The baptized Christian is one thing; his heresy is another. He can be re united "to the faith of this baptism;" his heresy was never united, never could be. Yet many persons talk of "the re-union of Anglicanism with the possibly-to-be-deformed Roman Faith." Here is where the great mistake comes in. Falsehood cannot be re-united with truth, because the two never had any previous union; but penitents can be re-united with the Catholic Church, by the door of the Sacrament of Penance.

So that we come back to submission as the only rational substitute for the fictitious "Reunion of the Churches." They who have tried submission know what it is—the embrace of the most tender of mothers. They who have not tried it think it must be "humiliating"—as though the kiss of peace from an angel could be humiliating.

If it be true there are no "churches"—in the Protestant sense of the word; and if it be true that, accurately speaking, there can be no reunion; it remains that we try to find some more reasonable solution of the state of warfare into which Christendom is

plunged. "A house divided against itself," is not the Christian idea of Christendom; and one of the horrors of this division is that the heathen world is kept waiting for that "reunion" which can alone convert them. For their sakes, as well as for our own, we should all strive to be united; for there can be no question that the reason why the whole world is not Christian is because the scandal of divisions makes it impossible. In addition to the huge schisms of Czarodoxy and Anglicanism, America and England between them count nearly five hundred Christianities, each one holding aloof from every other. Well may the heathen say to Protestant missionaries, "Go home, and settle among yourselves what Christianity is, and then come and teach us."

III.

If non-Catholics have accepted the estimate just now hazarded, that "the claim to possess the divine authority to teach truth" is in itself a strong presumption of that possession; they will have easily passed to the corollary, that "the disclaimer of divine authority is in itself a strong presumption of not possessing it"; and they will therefore naturally turn to the authority which says, "I can teach," and will ask, "Prove to me that you are from heaven and I will obey you." Well might the Catholic Church reply with her Divine Master, "Have I been so long time with you, and yet hast thou not known me?" But in truth all non-Catholics recognize the truism, that the Catholic Church alone is authoritative. It is because she is authoritative that they quarrel with her, alleging that they prefer their private judgment. The question with any Protestant is not, "Is the Catholic Church authoritative?" but, "Is the Catholic Church divinely authoritative?" This question we should like to try to answer.

If the Catholic Church be not divinely authoritative, then in what sense can it be said to be authoritative? Remember what it has done. It has through nineteen centuries defined Christian dogma, anathematizing all who disobeyed. Who was it who condemned the Arians, and decreed that the Blessed Virgin was "Mother of God?" Who was it that, instinctively detecting the subtle heresies of such men as Nestorius or Eutyches, defended the true doctrine of the Incarnation, and anathematized all who attacked it? Who was it who replied to Martin Luther's wild heresies by affirming the dogma of transubstantiation; and who was it, in the present century, who replied to the humanness of Protestantism by proclaiming the Immaculate Conception of the Mother of God, and subsequently replied to the mockers of supreme authority by affirming the dogma of infallibility? From the first Council of Jerusalem to the last Council of the Vatican, the Catholic

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Roman Church has alone claimed divine authority, has alone exercised the rights of that authority. If then this authority be not divine, what is it? Most certainly it cannot be human. No Christian could believe that a purely human authority had taught nineteen centuries of Christians to adore the Sacramental Presence on the Altar; to submit to the humiliation of confessing their sins before they were permitted to communicate; or to accept a rule of faith, from its very beginning to its very end, under penalty of excommunication.

If all this exercise of divine authority were purely human (to use a paradox which Protestantism has invented) then must the human and the divine be the same thing; for it would follow that the Son of God had given to a human institution the divine power of penetrating divine mysteries, of teaching His whole Church the exact truth upon every doctrine; and of enforcing obedience, under penalty of damnation, to the whole discipline of the whole Catholic life. There is only one escape from this obviously absurd dilemma, and the escape is more disastrous than the dilemma; it is that the Son of God has permitted all Christians to be taught lies (and this too for nearly nineteen centuries) by that very authority which He ordained to teach them truths. In this case the promises of the Son of God to be with His Teaching Church to the end of the world—to guide her into all truth so that the gates of hell should never conquer her—have been broken from the very beginning to the present time, and apparently will be always broken to the Day of Judgment; an "escape" from the dilemma which we prefer to leave to such intelligences as must take as low a view of the Son of God as of His Church. Indeed it were difficult to say whether the impiety or the absurdity of both the dilemma and the escape from the dilemma is more outrageous. more revolting to a Christian mind. If you accept the authority of the Teaching Church as being divine, her whole lifetime, her whole dogmatizing, have been consistent; but if you say that that teaching authority is not divine, you have to admit that a purely human institution has usurped the place of the Holy Spirit of God; has taught with most exquisite accuracy the mysteries of the divine mind; binding all men to obey her or to be lost. But is such an hypothesis so much as conceivable; we need not ask. is it reasonable, is it Christian? What! the only Teaching Church that ever existed is also the only supreme impiety, supreme blasphemy! The only Church which for nineteen centuries has said "You must obey "-and which has been obeyed by the enormous majority of all Christians—is also the only gigantic fraud for men's perdition! The only Church from which all schismatics and heretics have learned all that they ever knew about Christian

Truth is also the *only* Church which has so incarnated apostacy as to teach lies from the year 1 to 1893! Then away with Christianity from off the earth. So colossal a mistake, so inconceivable a failure, has never been matched in the world's history as the Protestant ideal of the Catholic Church.

But to return to common sense, and to talk as reasonable beings who believe in God and in the Divinity of Jesus Christ; we all know that the Catholic Church has authority, and that that authority must, of necessity, be divine. Knowing this, we also know that the Church must be infallible—that is, cannot be deceived by the Holy Spirit. Infallibility (in regard only to faith and morals) necessarily follows upon the divine commission to teach; for, that God should give a commission to teach, and should make it the Christian's duty to obey, while not giving the divine assistance to teach truly, is, in the rational order, an absurdity which is monstrous, and in the supernatural order inconceivable. A divine authority must teach divinely, because it is not a man or men who define truth, but the Holy Spirit, who can neither deceive nor be deceived.

IV.

Such reflections lead us easily to the conclusion that a reunion can mean only a submission; for, not to submit to divine authority would be insane; it would be not only wicked, it would be mad. The one question which every Christian has to ask himself, in searching for the answer to "What is truth?" is, "which is the divine authority among many authorities?" If there be no divine authority, there is no duty in believing; for no man can invent the Catholic faith for himself, any more than he can obey his own mind. On the other hand, if there be a divine authority, all that we have to do is submit to it. We must not talk about reunion, but about submission. God has not placed a divine authority in this world to make compromises with the "views" of various sects, but to teach all men the whole truth unto salvation, and to be obeyed with the whole will, the whole heart.

Doubtless, one reason why so many Protestants mistake the question is, that they mistake the simple scope of Catholic authority. They confuse the purely natural side of the Catholic Church with the supernatural powers of the Divine Teacher—the mere accidents with the essentials of Catholic life. Infallibility refers only to faith and morals—to the two provinces where the human reason by itself must be incompetent to define the divine truths. Catholic authority is infallible as to the truths of God, in so far only as they concern human salvation; beyond that, the supreme Pentiff, or all the bishops assembled in Council, can speak

only with the wise discretion of saintly men. A few weeks ago, a leading High Church newspaper affirmed that the Pope could not be infallible because he had found it prudent to modify his Irish policy in regard to Anglo-Irish complications. If highly-educated Protestants can publish such nonsense, how can we wonder that the "common people" get confused? Yet it would be impossible for any truism to be more simple than that a teaching authority can teach only within its own limits; faith and morals—not politics, nor astronomy, any more than chemistry or botany—being the sole provinces of the teaching Church's infallibility.

To submit, then, to Catholic authority is to submit only upon such subjects as are confessedly beyond the reach of natural knowledge. And surely, this is a perfectly reasonable submission. If we may employ a weak analogy, a man does not go to a physician to learn arithmetic, nor to a chemist to learn music, nor to an opera singer to learn quadratic equation. And it is the most astounding thing in the world, that every Protestant, of every trade, imagines that he was necessarily born a pontiff, competent to decide at any moment on every mystery of faith, and to teach the Church and all the Saints what is truth. Even naturally, such an assumption would be fantastic. But, since the truths of which we are speaking are not natural—or, at the least, are equally supernatural and natural—the claim of every Protestant to be a born pontiff (so infallible as to be able to teach every pontiff) must be dismissed as the wildest folly and self-delusion.

May we not, then, affirm, with perfect confidence, that submission is the only rational attitude for all believers in the divine authority of Christ's Church? We grant at once that if that authority be not divine, then reunion is as good a word as submission, yet perhaps enough has been said to show that a Teaching Church must be either divine or it cannot teach. The Protestant theory is: God founded a Christian Church, within whose communion divine truths should be known, yet He purposely withheld from that Church the possibility of being assured as to which were the truths necessary to salvation. He gave authority to a Teaching Church to define dogma, but only on the condition that she should not define it. He ordained sacraments, He ordained priesthood, He ordained powers; yet only on the condition that no Christian should know for certain what was the true or false doctrine as to the sacraments, what was the true method of assuring a true priesthood, what were the powers which should govern the whole Church. He therefore created a divine authority which was not divine; He specified means of salvation which were to be submitted to private judgment; He created a priesthood which was to be judged and ruled by every layman, and He authorized powers of which every man, woman and child was to be justified in fixing the limits or the impotency. We do not see what use there was in founding an institution of which every affirmative might be negatived by every member. If this prominent theory were the right one, and if the Church in the very beginning had been the miserably human failure which Protestantism has warmly approved for three centuries, it is certain that there would never have been any creeds: there would never have been the anathema of any heresy; there would never have been even the possibility of unity; there would only have been free thinking plus the historic fact of the life of Christ, and there would have been no Protestantism, because there would have been no Church. The very existence of Protestantism proves the divinity of the Catholic Church; for there must have been dogmatic truth before it could be denied, and there could not have been dogmatic truth without authority. To protest against authority is to admit authority; for the act of protest is the personal assertion of authority, the only difference between the Catholic and the Protestant (in regard to this one question of authority) being that the Catholic says it resides in the teaching Church, whereas the Protestant says it resides in his own person. "One Pontiff" is the theory of every Catholic: "one Pontiff as the Head of the teaching Church." "Every man is his own Pontiff" is the theory of every Protestant: Divine authority to judge of everything and of everybody being lodged in each individual human soul."

V.

Submission may well be distasteful to the Protestant. But how many real Protestants are there at this day? Fifty years ago it was possible to be a real Protestant, because the Catholic religion was not in the least understood by even the educated clergy of the Anglican Church. In these days, when the Catholic Church is in the midst of us, it would be impossible that any fairly educated Protestant should not at the least understand its main principles. Those main principles are authority and obedience. The High Church party confess to the principles, but they will not hear of their being logically carried out.

"Authority I admit," says the Ritualist, "but this authority belongs to each National Church, which may approve a national creed, and may enforce it." So that Christianity is a geographical accident. If you happen to be born in London, you must believe in the Thirty-Nine Articles; if Paris should, by a natural accident, be your birthplace, you may call the Thirty-Nine Articles ludicrous heresy; but if Moscow should have the honor of introducing you to Christianity, then you must believe in "The Holy

Synod," in the divine authority of Photius, and in the supreme pontificate of the Czar of all the Russias. So that the map of Europe, not the teaching of the Holy Spirit, is the infallible arbiter of both authority and doctrine. But if it be answered, "No, Anglicanism is the truth everywhere," then we have to deplore the inconvenience of the consequence that the Roman Catholic Church is true nowhere; so that the huge majority of all Christians, living and dead, are and have been the dupes of the devil instead of being the One Family of God. Either way the theories are absurd. Whether we accept the geographical theory of authority, which changes truth with the climate or with conquests, or accept the theory of the alone Anglican verity, which makes nineteen-twentieths of all Christians to have been heretics—and these heretics the only Christians who have been united—we have to accept an absurdity which, if men's minds were not accustomed to it, would make every Christian child to shout, "Folly!" And the Christian child, if he heard mention of "Reunion" between the one Divine authority and the human religions, would say, "No, not reunion, but submission; not compromise, but obedience to authority."

It is talking platitudes to affirm that divine truths can be defined only by an authority which itself is supernatural; and that obedience of mind and heart, in matters of divine faith can be rendered only to the Representative of God. And it is talking wildly to affirm that two or more divine authorities can be commissioned by the same Almighty God to teach "truths" which contradict one another, or to divinely rebuke each other's heresies. Why reason upon what has no reason in it? The "escape" which some Protestants think they find from a dilemma which both rationally and spiritually is unbearable is in the assertion that "it is not upon essentials that the churches or the sects are divided." They forget that it is upon the very question "What is essential, what is not essential"; that the innumerable churches, the innumerable sects are divided. If the divisions are not upon "essentials," there can be no apology, no excuse, for the myriad schisms; and if the divisions are upon essentials, the position is conceded for which we are now contending, that divine authority can alone determine the question. Since then, without a divine authority, we cannot know "what is essential, what is not essential," it follows that such divine authority must exist, or there can be no difference between the essential and the non-essential. Yet no Protestant would affirm this last postulate. It follows therefore that there is a divine authority. And since it has been proved that no Protestant "Church" possesses it, it follows that the Catholic Church is the sole divine authority upon this earth for the determining the essential and the non-essential.

"Christianity," it has often been urged, "cannot be reduced to a syllogism." No, that is true; but Catholicity can be vindicated by common sense. Suppose that you were to put the question to an intelligent pagan who had never heard of the existence of Christianity: "If God should send His Son to this world, to live and die to teach us divine truths, would he be likely to ordain that there should be no living authority who should interpret His revealed Truths through the ages?" The intelligent pagan would reply, "What then would be the use of the Revelation; since it is certain that the human intellect by itself could not define a large number of divine truths, whether that human intellect were colossal and highly cultured, or the mere average intelligence of the vast multitude," And the intelligent pagan might continue, "The very fact of a Revelation of a number of divine truths prove that all those truths were superhuman; and since the acceptance of all those truths—not of one truth, but of all truths through all ages, by all men, women, and children, would become intellectually and morally obligatory, common sense tells me that there would be a living divine authority to command obedience through twenty centuries of human resistance; and not only to command obedience but to punish by excommunication all who dared to oppose their judgment to one single truth." if you should proceed to put before the intelligent pagan the whole picture of the battling Protestant schisms, and should ask him his opinion about reunion, he would probably reply that he did not understand the question, for to his mind the submission of the disobedient must precede the request to be united. His common sense, unperverted by heresies, would grasp the case intuitively and as a matter of course; for he would apprehend that the divine mind, having established a divine authority would not admit of any compromises or discussions.

Yet we cannot wonder that non-Catholics, who have been brought up to obey themselves—to take themselves for their final arbiter in matters of faith—should find it difficult to realize the attitude of the Catholic mind, which insists upon a divine authority in divine matters. Let us consider for a moment the Protestant attitude, so that we may realize its difficulty, its great effort. The Protestant has always regarded private judgment as not only his privilege but his duty; so that his idea of "religious liberty" has been the liberty of choosing a *credo* out of the whole scope of religious opinionism. He has always regarded dogma as of human creation; not as the infallible ruling of divine authority, but as a sort of authoritative consensus of a few clergy. Indeed dogma is very like an Act of Parliament, in the sense in which Protestants understand it; it is a human decree, not regarded as immutable,

but as a convenient and useful formula for order's sake; so that to exalt dogma into the dignity of a divine certainty would be like exalting an act of Parliament into a divine law. This low estimate of the whole domain of Christian dogma has generated a low estimate of obedience; for why should a man obey a human dogma, save as he obeys an admittedly fallible act of Parliament, which may be altered next year, perhaps repealed? And as in the case of obedience to dogmatic verities, so in the case of submission to Cathelic Authority. If the dogma be uncertain it must be because the authority is uncertain, and submission to an authority which is uncertain can only be rendered with uncertainty. Such a submission would be submission to a temporary law, not to the eternal divine wisdom; the authority being fallible because it is human not infallible because guided by God. Hence submission in the Protestant mind, to Catholic authority seems like a sort of idolatry rendered to men; the idea being that Catholic authority is a usurpation of Divine authority, not an authority which was established by the Most High. And if the Protestant theory were true that the authority of the Catholic Church were the authority of human beings-bishops or priests-or were the authority of this or that human pontiff. Protestants would be quite right in regarding obedience and submission as conditional on their own estimate of human teachers. Since, however, the Catholic principle is that, in regard to faith and morals, God Himself teaches the Church through His rulers, it necessarily follows that Catholic obedience, Catholic submission, are not made to men but to God. Faith and morals belong to God, not to man; nor could any man who ever lived decree a dogma, if the decree issued from human penetration, it is the Holy Spirit guiding His Church into all truths, who alone decrees dogmas of faith and morals; and therefore, obedience to them, submission to them, are not humiliating. but are the most sweet and dignifying exercise of human intellect.

Why, then, not submit to Catholic authority? All Protestants whether they be Churchmen or Dissenters, are bewailing their ceaseless strifes and variations. In America as in England, the gravest af non-Catholics have expressed their ardent desire for conciliation. Schemes have been proposed; congresses have been assembled; bishops and clergy have drawn up "Certain Points of Agreement;" and though such experiments have come to naught, still every earnest-minded man says, "If it be possible, let us strive after reunion." The sole mistake of such admirable wishes or aspirations is in the not recognizing that there must be submission. Why wish for so-called reunion, save because truth cannot be divided; and since there can only be one true Church why not submit to it, instead of wasting years in futile talk? Mil-

lions of Protestants live and die outside the Visible Church, deprived of all the marvellous riches of her spiritual life, as well as of the exquisite enjoyments of her serenity, because they will not submit instead of speculating; will not obey, instead of inventing a thousand excuses. And so death comes, with no Last Sacraments, no Last Blessing, no Requiem, no Invocation, no Indulgences, the naked soul being sent forth alone on its Protestant journey, without one supernatural aid or consolation. Yet one moment's submission would do it all! "I submit," even said interiorly, and with full intention, would unite the soul with the one Catholic Church. And then would follow conditional baptism; the first enjoyment of a true confession; the first true communion; the first true confirmation; the admission into the Communion of Saints; the absolute certainty of a perfect faith and perfect worship; with an end forever of all Protestant doubt and human opinion, with all their necessarily accompanying heartaches and humiliations. "I submit" is the grandest exercise of the human will; for it lifts up the intellect to union with God-to the most sublime realization of the eternal wisdom.

ARTHUR F. MARSHALL.

UNIVERSITY COLLEGES: THEIR ORIGIN AND THEIR METHODS.

[Apart from its own intrinsic value, this article has a peculiar interest, owing to the fact that it is one of the last, if not the very last, emanations from the fruitful pen of the late highly gifted and deeply lamented Brother Azarias. The present article is only the first part of a paper which, because of its length, has been divided into two articles, of which the following is the first. The second we will publish in the next number of the Review.—Editor.]

- 1. Abelard and the Origin and Early History of Universities. By Gabriel Compayré. New York. 1893.
- 2. La Sorbonne, ses Origines et sa Bibliothèque. Par Alfred Franklin. Paris. 1875.
- 3. The University of Cambridge, from the Earliest Times to the Royal Injunctions of 1535. By J. Bass Mullinger. Cambridge. 1873.
- 4. A History of the University of Oxford, from the Eurliest Times to the Year 1530. By H. C. Maxwell Lyte. London, 1886.
- 5. De Studiis Literariis Mediolanensium. Auctore Joseph Antonio Saxis. Milan. 1729.

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COMPAYRÉ concludes the presace to his new volume in the following words: "I trust also, that the literary dictionaries of the future, if they should grant me a place in their pages, will have the goodness when they mention my name to follow it with this notice: Gabriel Compayré, a French writer, whose least mediocre work, translated into English before being printed, was published in America." We shall add to this notice: The book of which M. Compayré seems to be so proud is called "Abelard," and yet all that the author has to say about Abelard is confined to twenty-five pages The book really covers the same ground as Mr. Laurie's work, "The Rise and Constitution of Universities," and is therefore misnamed. The title suggested a subject upon which the author might have made a particularly bright book. Abelard's life, his teachers, his contemporaries, the schools in which he studied, the schools in which he taught, his pupils and his disciples, his doctrines, his methods, his persecutions, his influence—here is matter enough for so many interesting chapters, in which the author need not go over precisely the same ground so well tilled by the classic work of M. Remusat. This is the kind of book we had a right to expect from the title. And we fail to see the intimate connection between Abelard and the University of Paris which the author would establish. Abelard is in no sense its founder. He was to no greater extent its forerunner than was his teacher, William of Champeaux. Abelard was a brilliant meteor who crossed

the welkin of the twelfth century, throwing around him a lurid glare, awaking minds and creating excitement; restless, active, superficial, pretentious, bold, with sharpened intellect and a perennial flow of language. But in no sense can the university be traced to him. Had he never lived the university would have grown into corporate existence scarce a day later. There were scholastic disputations before his day; he may have systematized them more than formerly, but he did not create them. His learning was not at all commensurate with his fame.

M. Compayré may be a good professor; he certainly is not an apt scholar. When in 1877 he wrote the first book that brought him into notoriety—" Histoire Critique des Doctrines de l'Education en France depuis le Scizième Siècle"—he showed no less a decided proclivity to draw from sources that confirmed his prejudices, than great repugnance towards any authority at all favorable to the school or the system he would condemn. This method of quotation at second-handled him into very questionable company. He accepted information from sources the most valueless, and in consequence was led into blunders that would shame a schoolboy. Witness the following assertion concerning the Jesuits: "In metaphysics they suppress some of the questions the most interesting and the most essential, as for instance, all that regards the existence of God and the nature of His attributes." 1 How came M. Compayré to make this statement? He found a misrepresenting translation of the "Constitutions and Declarations" of the Jesuits with a hostile appendix, containing garbled extracts from the rules of this distinguished body, and among others, he read these words: In metaphysica questiones de Deo et Intelligentiis prætereantur. Now in a footnote M. Compayré avers that he has before him two complete editions of the "Ratio Studiorum." Had he opened either of them, he would have found a prohibition to touch upon those questions concerning God and His angels in metaphysical discussions, which depend wholly or in great measure upon revelation, and which therefore belong to the domain of faith.2 Pére Daniel called his attention to this and other blunders only little less glaring. 8

Now, to what degree has M. Compayré profited by this lesson? Let the reader judge from the following extract: "Thomas Aquinas had composed the 'De regimine principum,' and the 'De eruditione principum.' His disciple, Gilles de Rome, Archbishop of Bruges, who was tutor to Philip the Fair, also followed Aristotle

¹ Hist. Crit., t. i., p. 196.

¹ In Metaphysica, questiones de Deo et Intelligentiis, quae omnino aut magnopere pendent ex veritatibus divina fide traditis, prætereantur; Reg. Prof. Phil., p. 71; Ratio Stueiorum, ed. 1606.

Les Jesuites Instituteurs de la Jeunesse Française. 1880.

in politics." True it is that both the volumes here named are to be found among the collected works of the Angelical Doctor, but it is generally conceded that only two books of the first-named have been written by Thomas, while the latter work is now universally attributed to the pen of Peraldus, or William of Pérault. Where has M. Compayré picked up the information here so loosely expressed? Surely not from the works themselves, nor from any respectable account of them. Even the 'Histoire Littéraire de la France' loosely written as it is in regard to these books, would have enlightened the author and guided his pen to greater accuracy. Later on, we shall refer to them for another purpose than to express a platitude about the "Politics" of Aristotle. There is not a clause or phrase in the paragraph from which we quote that does not betray complete ignorance of the subject treated.

Now, why will M. Compayré to day, as sixteen years ago, accept such inferior material and impose it on his readers as something worthy of their intelligence? After the wholesome lesson of Pére Daniel one would think that he would be more cau-It is just such paragraphs as this that render M. Compayre's book unworthy of a permanent place in literature and undeserving of the niche he so modestly looks for. However, the author could not write an altogether worthless book, nor could he be dull if he tried. And when one begins to realize that one is reading a book not on Abelard, but on the mediæval universities, one finds much to admire and commend in the sketch. The style is picturesque and brilliant; the outline is clearly traced; the whole subject is cleverly handled. One is enabled to form a fair conception of mediæval university life from a perusal of the book. In this regard and to this extent may the book be commended. The ordinary reader may not observe the note of triumph with which the author records every step towards the secularization of the university; he may pass over the antipathy to celibacy that is evinced through the pages of the little work; he may forget that the author has overlooked, or treated inadequately, the influence of the religious orders upon university-life and when he has finished the perusal of the book, it may never occur to him that the very elements which the author ignores or belittles are the soul of the universities. With the extinction of these elements began the decay of the universities.

11.

Turn we now to university college-life. It brings us a step nearer to modern school-life. With the advance of the thirteenth century lawlessness grew more and more among university stu-

¹ Abelard , p. 290.

dents. They were imposed upon, in spite of ordinance and statute, by the townspeople with whom they boarded; they were frequently in the hands of Jews paying exorbitant interest on moneys loaned; they were daily exposed to become the victims of lewd men and women who were continually on the watch for new victims. Theirs was in many instances a life of hardships that was sustained chiefly by the buoyancy of youth and an insatiable thirst for knowledge. In the meantime, the regular clergy had schools of order and discipline in which youths were well cared for and jealously shielded from the trials and temptations that were constantly assailing the student quartered upon the town. The shining lights of their respective orders lectured in the university and attracted around them youths who from admiring their professors came to love their life of peace and quiet and religious discipline, and ultimately sought admission as members. These youths were generally of bright promise and good family. And so, Carmelite and Augustinian, Franciscan and Dominican—especially the last two-gathered into their novitiates the flower of mediæval youth. Men at one time dreaded sending their sons to Oxford lest they should become friars. In 1358 it was enacted that if any mendicant friar shall induce or cause to be induced any member of the university under 18 years of age to join the said friars, or shall in any way assist at their abduction, no graduate belonging to the cloister or society of which such friar is a member, shall be permitted to give or attend lectures in Oxford or elsewhere for the ensuing year.1 Richard Fitzralph, Archbishop of Armah, who bore the friars no more love than did his disciple, John Wyclif, tells how the friars of Oxford carried off an Englishman's son, then under thirteen years. and how the father was not permitted to speak to his boy except in the presence of the friars. The father was then in Avignon, bringing the case to the notice of the Pope.2 But long before this note of alarm was sounded religious cloisters were the only havens of security amid the turmoil of university life.

Not that the need of safeguarding the student was not felt by the authorities, but all the universities in their early days were poor. Neither Paris nor Oxford up to the middle of the thirteenth century possessed a building that it could call its own. The schools and halls were rented, or were granted by the religious orders, or even by the townspeople. The official dinners of the Masters of Arts were given at the common taverns of the town. So, at Oxford in the thirteenth and fourteenth centuries, the Faculty of Arts used to assemble in the Church of St. Mil-

¹ Munimenta Academica, i., p. 205. This statute was afterwards repealed. Cooper, Annals, i., p. 109.

¹ Lyte, A History of the University of Oxford, p. 174.

dred, while degrees were granted and other secular business was, by sufferance, transacted in the Church of St. Mary the Virgin. Still, even at the dawn of university-life, we discern traces of efforts made to assist and protect poor youth. There is a tradition that the Danish College was established as early as 1030, with enendowment for one hundred and thirty poor clerks. In 1187, Robert de Dreux, brother of Louis VII. of France, founded in Paris a house of prayer and a house of studies under the patronage of St. Thomas of Canterbury. Again, we read that in 1180, Joce, of London, on his return from Jerusalem endowed a room in the Hotel Dieu, in which eighteen students might be lodged. The college was afterwards transferred to the square of Notre Dame, still retaining its name of Maison des Dix-Huits.³ The primary object of these and similar institutions was simply to afford shelter and protection to the scholars. There was no intention of making them institutions of learning. Indeed, we may trace their beginning to the hostel in which certain licensed masters were wont to keep students at moderate terms. "The hostel of the English universities in former times," says Mullinger, "may be defined as a lodging house under the rule of a principal, whose students resided at their own cost. It offered no pecuniary aid, but simply freedom from extortion, and a residence where quiet would be ensured and some discipline enforced; advantages, however, of no small rarity in that turbulent age." 3 These hostels or inns were comparatively few and wholly inadequate for the numbers that flocked to the universities. It was but in the beginning of the fifteenth century that Oxford was in condition to forbid clerks from lodging in the houses of laymen.4

In the meantime, it became evident that, while the mendicant orders were flourishing and absorbing the best talent in the universities both among masters and students, the secular clergy were decaying. How else could it be considering the dangers to which youths were exposed upon their entrance into university life? Take those who flocked to Paris. They were badly lodged and and poorly fed; their clothes and books were exposed to pillage; usually, at an early stage of their entry into Paris, they were relieved of their money. In spite of the vigilance of the officers of the nation under which their names were inscribed, they were cheated, robbed, imposed upon at every turn. The townspeople regarded them as legitimate prev. Designing men and women pursued them, and set snares for them, and made them victims of

¹ Lyte, A History of the University of Oxford, p. 98.

Lebeuf, Histoire de la Ville et tout le Diocèse de Paris, t, ii., pp. 129, 130,

³ The University of Cambridge, i., p. 217.

Lyte, A History of the University of Oxford, p, 69.

⁶ Ch. Jourdain, Excursions à travers le moyen âge, p. 249.

their wiles, till the last penny was extracted. Many a fond father, in his desire to see an apt son become a learned clerk on the road to preferment and distinction, impoverished his family that the favored son might have sufficient means to live in Paris, only to find that son return one day rich in well-bought experience, but poor in all else. Rutebeuf describes such a typical young man. His father sells some of the patrimony in order to equip him for the university. The youth goes to Paris, falls into bad company, is soon rid of all that he had brought with him-even his ambition to study-and his "money gone and his clothes worn out, he has to start life anew."

> "Partout regarde, partout muze, Ces argens faut et sa robe uze ; Or tout est à recoumancier."1

III.

Such experiences set men thinking. Why could not the poor youths struggling under so many difficulties to enter the secular priesthood find some of that shelter and care that was so lavishly bestowed upon the candidates for religious life? This question occupied the mind of Robert Sorbon, the pious and learned confessor to Louis IX. In 1256, with the assistance of the saintly king and of several wealthy ecclesiastics about the court, he founded an institution in which youths aspiring to the secular priesthood might be housed and fed and their studies superintended. This institution was from the beginning especially designed for a nursery of theology. Burses were established for sixteen students, four from each nation. These youths led a life of economy and regularity. Everything in and about the house was poor. "Poverty," says Crevier, " was the peculiar attribute of the house of Sorbonne, and for a long time it preserved the reality with the title." Under royal sanction and papal blessing the institution flourished, and when Robert died, in 1274, the Sorbonne had already become the headquarters of the faculty of theology.3

The regulations that Robert drew up and applied during the twenty years that he governed the institution prove his wisdom and practical good sense. They remained in vogue until in 1790 the Sorbonne went under in the catastrophe of that year. Robert established a preparatory school, and the students were admitted to the college only after receiving their bachelor's degree, maintaining a thesis called after the founder, a Robertine, and obtaining a

¹ Li Diz de l'Universitei de Paris, t. i., p 185. The same experiences are still bought at the same price. See Alphonse Daudet's Sappho.

² Histoire de l' Université de Paris, i., pp. 494, 495.

³ A. F. Franklin, La Sorbonne, p. 16,

majority of votes after three ballotings. There were two classes of members—the guests and the fellows. The guests—hospites were provided with every facility for study, but they took no part in the administration of the house. They were permitted to study in the library, but were not entrusted with the key. They were obliged to leave, in order to give place to others, as soon as they had received the doctor's degree. The fellows-socii-had more privileges. They shared in the administration of affairs. Absolute equality reigned among them. Those who were rich paid to the establishment a sum equivalent to the amount received by the bursars. The prior was chosen from among the youngest fellows, and he remained one year in charge. From amongst the most ancient four seniors were chosen. Their duty was to manage difficult affairs and maintain ancient customs. The fellows met once a month to discuss all matters of administration. the Sorbonne under the patronage of the Blessed Virgin Mary, but from the fourteenth century we find its patron saint to have been St. Ursula.1

The pious founder appreciated the value of a good library in those days when books were scarce and expensive. "He was careful," we are told, "to collect in his college all books necessary for theologians and to instal a library."2 At his death he bequeathed to the college all his books, including the splendid folio Bible inscribed in 1270 and supposed to have been presented to him by Louis IX.3 In 1289 the library was properly organized. It was divided into two parts. One was called the large library-magna libraria-and included the works which were the most frequently made use of; these were chained, and rare and exceptional were the occasions when it was permitted to remove them. The other part was called the little library-parva libraria-and contained all duplicates and works rarely consulted, which might be loaned upon a deposit of a certain sum of money or any article of sufficient value to cover the cost of the book. In 1290 the whole library contained 1017 volumes, among which is the "Romance of the Rose," the only book in French mentioned. A beautiful feature of charity in those days was the bequeathing of libraries for the use of poor students. Thus we read that Gerard d'Abbeville, in 1270, bequeathed not only to the students of the Sorbonne but to all lettered seculars his theological works. In the following year, Stephen, Archbishop of Canterbury, left his books to the Church of Notre Dame with the intention that they be placed at

¹ Lebeuf, Histoire de la Ville et du Diocèse de Paris, t. i., pp. 240, sqq.

² Ladvocat, Dictionnaire Historique, Art. Sorbon.

³ This is now No. 15,467 among the MSS, fonds Latin, in the Bibliothèque Nationale.

the disposition of poor scholars who should find use for them in pursuing their studies.¹

The counsels that Robert left the students were no less valuable. They were unearthed not many years ago, and as they throw light upon college-life in that day it may not be amiss to condense them: "The scholar," he says, "who would study with profit should observe the following rules: first, to dedicate a certain hour to a specific piece of reading; secondly, to fix attention upon what he is about to read, and not to pass lightly to something else. 'There is,' says St. Bernard, 'the same difference between reading and studying as exists between a host and a friend, between a greeting exchanged on the street and an unalterable affection.' Thirdly, to extract each day from our reading some thought, some grain of truth, and to engrave it on the memory with special care; fourthly, to write out an epitome of what one has read, for the words not confined to writing fly like dust before the wind; fifthly, to confer with one's companions in the disputations or in familiar conversation. This practice is even of greater service than reading, because it results in clearing up all doubts and the obscurities that may have remained after reading, Nihil perfecti scitur, nisi dente disputationis feriatur; sixthly, to pray. In point of fact, prayer is one of the best means of learning. St. Bernard teaches that reading should excite the affections of the soul, and that it should be a means of elevating the heart to God without interupting study." This pious doctor cautions young men against wasting their time upon trifles. His words throw light upon one of the greatest weaknesses of mediæval university life. "Certain scholars," he says, "act like fools. They put forth great subtlety in trifles and prove themselves void of intelligence in important matters. order to make it appear that they have not lost their time, they form thick volumes of parchment filled with blank pages and have them covered in elegant red skin binding. They afterwards return to the paternal roof with a sackful of science that can be stolen by robbers, devoured by rats and worms, or destroyed by fire or water." With his eye upon that class of students who do not put their knowledge to good use he also says: "Grammar forges the sword of the Word of God; rhetoric polishes it; finally, theology makes use of it. Some there are who unceasingly learn to make that sword, to sharpen its edges, and by dint of whetting to wear it all away. Others keep it entirely confined to its scabbard; when they would draw it forth they find that they have grown old, the iron has rusted, and they can no longer effect anything. As for those who study solely with the intention of reaching high places

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¹ Franklin, La Vie Privèe d'Autrefois, p. 84.

in the Church, they are greatly deceived, for they scarcely ever attain the objects of their ambition." These counsels were solid and timely. They left their impress upon the college. A certain number of doctors applied themselves exclusively to the solution of cases of conscience. With practice came skill, and in the course of time people from all parts of Europe were wont to send delicate cases for solution, and thus did the Sorbonne come to be regarded as the greatest authority in Christendom in solving moral problems. It was consulted by king and Pope.

During the latter half of the thirteenth century, colleges multiplied. In 1262, Walter de Merton, then Lord Chancellor of England under Henry III., obtained a license to assign certain manors for the maintenance of clerks studying in the schools of Oxford.2 His main object was to secure for the secular priesthood the academical benefits which the religious orders were so largely enjoying. "He borrowed from the monastic institutions the idea of an aggregate body living by common rule, under a common head, provided with all things needful for a corporate and perpetual life, fed by its secured endowments, fenced from all external interference, except that of its lawful patron." Thus was Merton the first to achieve for the secular priesthood in Oxford what Robert of Sorbon succeeded in doing for the same order in Paris. motives actuating these founders were the same; the regulations enforced are alike in many details. At Merton, as in the Sorbonne, the students were to be thoroughly grounded in the liberal arts and in philosophy before being permitted to study theology or canon law. Theology is the main object of the foundation of Merton as well as of the Sorbonne; but in Merton a few were permitted to study canon law and as much civil law as was needed to throw light upon the canons. Poor boys of the founder's kin, to the number of thirteen, received a free preliminary education in which they were to be qualified for scholarships. "While he provides for a good liberal education, and a general grounding in all subsidiary knowledge, he jealously guards his main object of theological study both from being attempted too early by the half-educated boy, and from being abandoned too soon for the temptations of something more profitable."4 It is designed that one of the fellows shall make a special study of grammar, that he shall devote himself expressly to that subject, "that he shall be provided with all the necessary books, and shall regularly instruct the younger

¹ Bibl. Nat. MS. Lat., 15,971, fol. 197, sgg.; Le Coy de la Marche, Le Treizième Siècle, pp. 50-52.

² Lyte, A History of Oxford University, p. 73.

³ Edmund, Bishop of Nelson, Sketch of the Life of Walter de Merton, p. 22.

⁴ Bishop of Nelson, Life of Walter de Merton, p. 22.

students, while the more advanced students are to have the benefit of his assistance when occasion may require."

Other portions of the statutes were evidently inspired by monastic rules. Each scholar was subjected to a year's probation before becoming a permanent member of the society.² A spirit of fellowship and equality was cultivated. The students wore a uniform. All dined and supped together while one of them read an edifying book in Latin. They had a share in government and management. The eldest in a dormitory was known as the dean, and presided at the rising and retiring. Three of the fellows acted as bursars, and five as auditors of accounts. Three times a year there was a general scrutiny of conduct, when the behavior of each inmate was minutely examined and all grievances were ventilated. Should any scholar accept a benefice or enter a religious order, he was obliged to vacate his place.³ All were required to attend the commemorations of benefactors three times a year.

In 1280 the bequest left by William of Durham, was employed to establish University Hall, and other benefactions enabled the Hall to own a library from which books might be borrowed. The discipline of this foundation was severe. Disputations were held in the house as well as in the schools. No book was lent out of the house without a deposit of more value than the book, and the consent of all the scholars. The scholars were allowed to use a common seal. It was enjoined upon them to live honestly as clerks, in a manner befitting saints, not fighting, not using scurrilous or foul language, not reciting, singing or willingly hearing songs or tales of an amatory or indecent character, not taunting or provoking one another to anger, and not shouting so as to disturb the studies or repose of the industrious.4 The statutes of Baliol, given in 1282, breathe the same spirit, and no doubt were suggested by the Franciscan confessor of Dervoguilla. The principal was elected by the scholars from among themselves. The scholars were to attend lectures daily and hold fortnightly disputations in their own house. They were to attend services in the parish church on Sundays and hear the sermon. If the weekly allowance were not sufficient the richer scholars were levied upon to make up the deficiency, and should any grumble, they were expelled. The food that remained after a meal was to be given to some poor scholars.5

The Sorbonne in Paris and Merton in Oxford were the types after which all mediæval colleges were erected. But it took three hundred years to mature the collegiate system. It was only about

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¹ Mullinger, The University of Cambridge, i., p. 168.

⁴ Munimenta Academica, Statutes of William of Durham, i., pp. 56-61.

⁵ Lyte, 2, 86.

1550 that it became predominant. The college of Walter de Merton was for some time looked upon with suspicion, as a dangerous experiment. In the meantime, there were established boardinghouses for students having no burses, but able to pay their way. Laymen at first rented chambers from the rector of the university. and prepared some students in private. Finding the practice lucrative, they enlarged their field of operations. These houses became very numerous and were known as pedagogics. They were encouraged and were considered far better than the miserable, dingy, close ill-ventilated holes and dens into which students were thrust by the townspeople in various parts of the city. But with time the keepers of the pedagogics abused their position. They neglected the moral and religious training of the youths confided to them, regarding them as simply so many sources of income. Gerson accused these men of crass ignorance, negligence and immorality. Through fear of losing their pupils they would not correct and punish them. They took no pains to form their boarders to practices of piety and decorum. These youths were as great strangers to the doctrines of Christianity as pagans themselves; they behaved badly in church, even to the extent of annoying the preacher by interruptions, mockeries, hisses and whisperings.1 Cardinal d'Estouteville when reforming the University of Paris, was severe upon this class of men. He forbade them to run to the inns and taverns in order to recruit their houses, and he would have them cease speculating upon the food and accommodations of the students, ruling at the same time "that they ask only a just and moderate price for provisions according to their kind and season, and that the food be served up clean and wholesome." In the later organization of the university we distinguish three classes of students. I. There were the students boarding outside; two usually occupying the same room, and frequently the same bed. These were known as martinets-the chamberdekyns of Oxford-and were looked after by the regents. 2. There were the students under the pedagogues; these were called camerists. 3. There were the college students who boarded with the principal and were known simply as board-Those elderly students who passed from school to school and from branch to branch, seeming to have no definite aim in pursuing their studies—and indeed no other aim in life than to live and die students of the university-shiftless fellows without the ambition of excelling in anything—were called galoches,3 England, as the number of colleges increased the hotels declined, and were either merged in the colleges or disused.4

¹ Opera, t i., p., 110. Letter written about the year 1400.

² Du Boulay, Hist. Univ. Paris. t. v., p. 572.

⁸ Etienne Pasquier, Recherches sur la France, liv. ix., chap. xvii.

⁴ Robert Potts, Liber Cantabrigiensis, p. 177.

IV.

Although the colleges were at first regarded with suspicion, still as their numbers increased they became the object of special soliciitude on the part of the university authorities. In Paris, the rector was in duty bound to visit each college at least once a month. After the 17th century, when the university was losing all hold upon the colleges, these visits became less frequent. But when they did occur they were made the occasion of great rejoicings for the stu-"If the rector enters a college," says Pasquier, "there is no telling the joy with which he is welcomed and the acclamations with which he is received, evidences of the honor and respect in which he is held."1 On these occasions the rector made his visitation in state, walking through the city clothed in his scarlet cloak, preceded by two bedels bearing silver maces, and followed by masters in arts marching two by two in procession.

Cardinal d'Estouteville, in 1452, empowered the rector to convoke the four nations in order to elect four regents to whom he might delegate this mission of visiting the colleges, inns, and pedagogics, and whose duty it was to ascertain the morals, discipling. teaching, and food of each, and with the aid of the bishop to reform whatever called for reformation.2

It were a long and tedious task to trace the story of the relations of the colleges with their university. Suffice it to say that these colleges were established rather as places in which poor scholars were supplied with board and lodging than as schools for purposes of instruction. The principal at first conducted the students to the lecture hall of the professor, and led them back to the college in a body. Here, with the aid of assistants, he superintended their studies, started disputations, occasionally heard the scholars recite, and thus profitably filled that portion of the day which was not spent in attending lectures. But seeing that this passing to and fro was an occasion of disorder and entailed considerable loss of time, the masters, as soon as students became numerous enough, at first privately lectured in the colleges. These lectures afterwards became recognized by the university authorities. "We do not exactly know," says Du Boulay, "when this practice began; it is generally thought that the College of Navarre, which was reformed in the year 1464, was the first to open its gates to these public professors of letters."3

And so these institutions grew from their first lowly and unpretentious beginning to be themselves centres of light. Their daily

¹ Recherches sur la France, liv. ix., chap. 22, t i., p 937.

² Bulaeus, Hist. Univ. Par., t. v., p. 570.

⁸ Hist. Univ. Par., in loc cit.

regulation will give clearer insight into college life than could a lengthy description:

At 4 o'clock, rising. The students were awakened by a member of the philosophy class, who went around the dormitory to arouse those who gave a deaf ear to the bell, and to light the candles at the season when candles were needed.

At 5, the same member saw that the scholars were placed in order around the halls. During the hour from 5 to 6 the regents gave their first lesson.

At 6 o'clock, breakfast, which consisted of a small piece of bread. After breakfast there was rest, but no recreation.

From 8 to 10, the principal lesson of the morning.

From 10 to 11, discussion and argumentation.

At 11, dinner, accompanied by reading of the Bible or lives of the saints. The chaplain said the prayers before and after meals, made mementoes of benefactors, and added thereto pious exhortations. The principal took up the word, gave admonitions, distributed praise or blame among the students, and announced the punishments and corrections determined upon the evening previous.

From 12 to 2, revision and interrogation regarding the morning's lessons.

From 2 to 3, repose, when there was public reading of some poet or orator—ne diabolus hominem inveniat otiosum.

From 3 to 5, the principal lesson of the afternoon.

From 5 to 6, discussion and argumentation upon the lesson just attended.

At 6, supper.

At 6 30, questionings upon the lessons of the day.

At 7.30, complin and benediction.

At 8 in winter and 9 in summer, bed-time.

Masters and pupils authorized to do so might keep the candle burning till 11 o'clock. The wild and unrestrained manners of the students became softened by theatrical representations within the colleges, and by outdoor sports and promenades. In the afternoons of Tuesdays and Thursdays the students were given free time, when they were permitted to walk to the Prés-aux-clercs. Long promenades into the country were made with great pomp and ceremony. Besides the Landit, there were certain annual ones that were carefully observed. Such were the promenades of Notre Dame des Vignes, Notre Dame des Champs, and a grand promenade in May, when the students, upon their return, assembled before the door of the rector and there planted a tree. From the regulations here given there were variations. Thus, in the College of St, Barbe, free time was given only after the principal lesson of the afternoon had been gone through.1 In other schools the whole of Thursday was given to recreation.' Feast days were numerous, but they were not idled away. They were passed in devotions and in studies outside the university programme, according to the taste of each student. No leave of absence was granted upon feast An often-mooted question was what constituted servile

3 Noël du Fail, Oevures, t. ii., p. 186.

¹ J. Quicherat, Histoire du College de Sainte Barbe, t. i., ch. x., pp. 83 sqq.

work for a student on Sunday. Durand de Champagne, in the beginning of the fourteenth century, decided that scholars were not permitted to make complete copies of their notes, nor to hire out their labor by transcribing for others, but they might enter notes of lessons to preserve the memory of them, as well as of sermons taken down with the stylus. The students were allowed to go home during the month of September. This period was the vintage-time—les vendanges. The term "vacation" was confined to the three summer months, during which the superior courses and examinations of the university were suspended.

The tuition in the colleges was a variable quantity, and was regulated according to certain statutes of the university. It depended greatly upon the vintage and harvest. Each year it was definitely fixed by the rector, the deans of the four faculties, the principals of the colleges, and two Parisian merchants. Another statute authorized the professors to receive from each scholar, without the exacting or naming of any amount on their part, five or six gold crowns towards the end of the school-year. In the month of June, during the feast of Lendit, each scholar offered his regent a lemon, upon the rind of which the golden crowns were arranged, the whole being placed in a crystal vase filled with sweetmeats. At one time the pupils of the whole school, supplied with this offering, marched in great pomp to the playing of fife and the beating of tambourine, and with formal ceremony presented it to the regents; but the custom was abolished in 1600.

Few of the masters and regents were overburdened with wealth. The colleges, with rare exceptions, retained the primitive spirit in which they were established. They continued to be sheltering schools for poor youths, conducted under the auspices of religion, and the impress of poverty remained stamped upon their rules, the food given and the customs handed down. Mr. Lyte, speaking of Oxford, says: "In its corporate capacity, the University was undoubtedly poor, and it had scarcely any funds applicable for general purposes." The principal and his assistants, in many of the Parisian schools, lived on a pittance of three or four sous a week, and were obliged to resort to other means to eke out a living. When Sir Thomas More, through reverse of fortune, found himself obliged to economize, he wrote to his wife: "But my counsel is that we fall not to the lowest fare first; we will not, therefore, descend to Oxford fare." Oxford fare was the type of poor living.

3 Statutes, art. 32.

¹ Histoire Litteraire de la France, vol. xxx., p. 302.

² Statutes, art. 67.

Franklin, La Vie Privée d'Autrefois, p. 216,

⁵ Hazon, Eloge Hist. de l'Université de Paris, 1771.

A History of the University of Oxford, p. 97.

Poor scholars were wont to receive from the Chancellor a license to beg.1 And Sir Thomas describes them, with bags and wallets, singing Salve Regina at rich men's doors. The poor students of Montaigu College went to the neighboring Chartreux Convent for their breakfast, awaiting their turn to be served with the other indigents. It is to be observed that not all college students were obliged to beg. There were two classes in every college, the rich, who paid for their maintenance, and the poor, who worked and begged for it. The meal of the junior students consisted of stale bread with half an ounce of butter, a plate of vegetables, half a herring, or an egg. The larger students, by reason of their age and prolonged labor, were allowed one-third of a pint of wine, a whole herring or two eggs, and a small piece of cheese or some fruit. They were never given meat.* The rigorous discipline and extreme abstinence practised in the College of Montaigu was proverbial, and intellect and appetite became equally keen with the name:

" Mons acutus, ingenium acutum, dentes acuti."

Erasmus could not find words severe enough to stigmatize the inhuman treatment and unwholesome food that shattered his constitution and enfeebled him for life, while a student in this college.3 Rabelais had no kind words for the same institution and its sparrow-hawks. Ponocrates denounces the cruelties practised thus: "Criminals and condemned murderers are better treated." And he ends in this emphatic manner: "If I were King of Paris, I would set fire to the place and burn up both principal and regents for permitting such inhumanity before their eyes."4 Francion, in 1630, is no less severe as regards the fare doled out in the College of Lisieux. He considered the swineherds of his native town better nourished. "Withal," he says, "we were called gourmands, and we should put our hand in the dish each after the other. Those who ate sparingly were the favorites." Indeed, Francion's whole description shows that he had fallen into the hands of a seventeenth century Squeers,5

But in order to be understood, mediæval manners and customs are to be looked at with other eyes than those of the nineteenth century. Francis of Assisi, in making poverty his bride, idealized that virtue.⁶ His disciples sanctified and exalted begging and caused men to respect poverty. There was no humiliation in

¹ Munimenta Academica, ii., p. 684.

Félibien, Histoire de Paris, t. iii., p. 731.

³ Dialogue, Flesh and Fish.

⁴ Gargantua, liv. i., chap. xxvii., pp. 119, 120,

⁵ See A. F. Franklin, La Vie Privée d'Autrefois; Ecoles et Colleges, pp. 223, 224.

[•] Paradiso, xi., 64-100.

being poor; there was no personal degradation in asking an alms. Students no more lost their self-respect in begging for the house, or in doing menial service for their instructors, than did the page in waiting upon his master. This broad and elevated view of poverty established a brotherhood of feeling that inspired the better off to extend a helping hand to those less favorably circumstanced. The bursars of the college distributed their leavings to the poor scholars of their nation. Masters gave their pupils cast-off clothes and shoes.1 This thoughtfulness extended to their holidays. 1214, the commonalty of Oxford agreed to pay fifty-two shillings yearly for the use of poor scholars, and to give six hundred and fifty of them a meal of bread, ale, and pottage, with one large dish of flesh or fish on St. Nicholas' Day.' The poor students themselves resorted to many makeshilts that they might be enabled to pursue their studies. Sometimes they copied books and transcribed notes; sometimes they swept and garnished the rooms of a rich companion or an instructor to whom they attached themselves; sometimes they kept their lodging-house clean and orderly. Boys with good voices sang from door to door. This was the custom, even in Luther's dav.8

The cost of instruction was in proportion to the pecuniary resources of each student. He who affirmed under oath that he had only sufficient to pay the expense of board and lodging was charged nothing for instruction. The education of youth ranked among the works of mercy, and indigent scholars were often thought of in men's last will and testament. Chests or funds were established for their temporary relief. Whoever borrowed money from the chest established by the Countess of Warwick, in 1203, was obliged to say the Paternoster thrice in honor of the Holy Trinity, and the Ave Maria five times in honor of the Blessed Virgin.4 It must be said of the University of Paris, along the line of its whole career. that there was a conspicuous lack of economy and forethought in money matters. Just as the bursars threw all surplusses into a common fund for the poor scholars, even so the excess of receipts over expenses was distributed among masters and bedels, and frequently drunk in the taverns, Of course, in these matters, as in all else, there were exceptions; there were students who thought only of dress and display, and there were masters who extorted money from their students.

The discipline, the exercises and pastimes of college life in its

¹ De Disciplina Scholarium, cap. iv.

² Anthony à Wood, i., p. 185.

³ Schmidt, Jean Sturm, p. 39.

Munimenta Academica, i., p. 63.

Bulæus, Hist. Univ. Par, iv., 674; Thurot, De l' Organization, 27.

good and its bad aspects have been faithfully sketched by Rabelais in his terrible satire.1 The colleges continued the traditions of the university schools in the observance of their holidays, games, amusements and customs. The newcomers into the college—bėjaunes—were severely handled by the old pupils. They were terrorized into the performance of acts the most ridiculous or most dangerous, as suited the whims of their persecutors. Our modern hazing is a relic of these mediæval days. In Germany the custom of formal initiation was somewhat in the following manner: The freshman was seized, arrayed in a garment of coarse stuff, and upon his head was placed a cap with horns or ass's ears. His companions then chased him around, and, having caught him, they pretended to clip his ears with shears, shave him with an axe and stab him with augurs of wood, in order, as an ancient author puts it, that the new student may learn to suppress the horns of vanity, smooth away the rough corners of his nature, and clear the ways to his intellect. The paraphernalia was afterwards deposited in the centre of the hall, to indicate that the student had now cast from him all those evil habits which made him I ke unto the brute. His hair was then cut. An enormous ear-pick was pointed towards his temple, to indicate that he should listen only to wise and discreet discourses. A wild boar's tooth was extracted by means of long pincers; the operation was intended to show that the student should keep clear of calumny and slander. His hands and nails were cleansed, as an emblem that he was to avoid all quarrels. A black beard was painted on his face, as an image of his entering upon the years of manhood and a warning to him to throw uside the things of childhood. A chorus was sung over him as an emblem of the harmony in which he should live. He went on his knees before those assisting at the ceremony, as a token of respect for authority. The horns having been taken off and laid aside symbolized the fact that the student was changed and rose up a new He was then given the wine of gaiety and the salt of wis-Here ended the initiation, after which the student was received by his companions to the new life of study.2 This mode of initiation was one of universal practice in the early days of university life; indeed, the tradition of it may be traced back to pagan times. St. Gregory Nazianzen speaks of a similar ceremony practised in Athens in his day, in order, as he tells us, to take the pride out of the young men and render them docile.3 Before me lies an old engraving representing the process of initia-

¹ Gargantua, liv. i., chaps. xvi-xxiv.

² A. G. Strobel, *Histoire du Gymnase Protestant de Strasbourg*. Appendix, No. 8, p. 133.

³ See Colin de Plancy, Dictionnaire Feudales, t. i., pp. 57, 58.

tion. The imprint is of 1666, but the scene was then at least three hundred years old. Spectators are seated apart. Two subjects are upon the floor awaiting the good pleasure of their torturers. Their horned caps are thrown one side. A would-be executioner stands over them with a battle-axe lifted up in the act of striking. Behind this man is a youth subjected to some other stage of the initiation; in the background others are represented as being led into the hall, each accompanied by his executioner holding a mace. In all these rites and ceremonies masters united with students. They were one in study, one in play, one even in the disorders that arose from time to time. In this manner may we catch a glimpse of mediæval college life far more instructive and suggestive than that revealed by charter and statute.

 \mathbf{V}

Cardinal Newman sums up the relations of colleges to universities in the following words: "At first universities were almost democracies: colleges tended to break their anarchical spirit, introduced ranks and gave the example of laws, and trained up a set of students who, as being morally and intellectually superior to other members of the academical body, became the depositaries of academical power and influence." In proportion as the colleges became more perfect, the university began to decay. Some trace the decline as far back as 1380. Disintegration set in very rapidly after the Renaissance. The ecclesiastical character of the university diminished, and it grew more secular. In 1452 masters in medicine were dispensed from celibacy; in 1600 doctors in law attached to the university were permitted to marry. The Jesuits succeeded so admirably in perfecting the college system that at their door may safely be laid the chief cause of the decline of the university of Paris. By the end of the seventeenth century they had purchased twelve of its colleges. About 1764 twenty houses of the university were closed because they were not self-sus-

Already in the seventeenth century murmurs began to arise concerning the decline and the inefficieny of the universities. In 1602 there appeared in England an appeal to Parliament to reform the universities of Oxford and Cambridge. A copy of this petition now lies before me. It is signed J. H., and in all probability is written by the Anglican bishop, Joseph Hall.⁶ The author is wholesale in his condemnation of university studies, uni-

¹ Ritus Depositionis. Argentinæ, apud Petrum Aubry, 1666.

¹ Thurot, De l' Organisation de l' Université, p. 39.

³ Historical Sketches, Universities, pp. 221, 222.

⁴ Thurot, p. 131. ⁵ 1574-1656.

versity methods and university results. "I could never yet," he tells us, "make so bad an idea of a true university, as that it should serve for no nobler end than to nurture a few raw striplings come out of some miserable country school, with a few shreds of Latin, that is as unmusical to a polite ear as the gruntings of a sow, or the noise of a saw can be to one who is acquainted with the laws of harmony. And then, possibly, before they have surveyed the Greek alphabet, to be racked and tortured with a sort of harsh. abstracted, logical notions, which their wits are no more able to endure than their bodies the strapado, and to be delivered over to a jejune, barren, peripatetic philosophy suited only (as Descartes says) to wits that are seated below mediocrity. And then as soon as they have done licking of this file to be turned to graze in finer ethics, which perhaps tells them as much, in harder words, as they had heard their mothers talk by the fireside at home." This is the sum of knowledge that Hall finds in the universities of his day. Evidently the spirit of Bacon and Descartes is abroad.

What does he expect? What would he have? Here is his conception of what a university should be: " I have ever expected from an university, that though all men cannot learn all things, yet they should be able to teach all things to all men, and be able either to attract knowing men from abroad out of their own wealth or at least be able to make an exchange." He finds the universities lacking in chemistry, in anatomy; there are no masters to make a thorough examination of old tenets or to review old experiments and traditions; none to make a survey of antiquities or solemn disquisition into history; there is an absence of all ready and generous teaching of the tongues. All these deficiencies he would have supplied—"not by some stripling youngster, who perhaps understands that which he professes as little as anything else, and mounts up into the chair twice or thrice a year to mutter over some few stolen impertinences, but by some staid man of tried and known abilities in his profession."3 He thinks the university schools "have not yet arrived to the exactness of the Jesuit colleges." Lord Bacon's estimate of the same colleges was no less favorable. "In all that regards the instruction of youth," he says, "we must consult the classes of the Jesuits, for there can be nothing better."4 Hall beseeches parliament to reduce "those friar-like lists of fellowships" into a fewer number, and those retained "to be bestowed upon men excellent in their particular endowments

3 Ibid., pp. 27, 28.

¹ An Humble Motion to the Parliament of England Concerning the Advancement of Learning and Reformation of the Universities. By J. H. London: Printed for John Walker, at the Starre in Popes-Head Alley, MDCII., pp. 25, 26,

² *Ibid.*, p. 27.

and peculiar for some use or other, so that the number of the professors might increase." He suggests the combining of all the colleges thinly scattered and poorly patronized up and down the land under one or other of the great universities; that there be greater freedom of the press and that two copies of every new book go to the public library; that all medals, statues and other antiquities at the time public property or confiscate to the crown go to the university museums; finally, that learned foreigners be duly honored and encouraged to make their homes in the universities.2

An anonymous writer of the same period, evidently intimate with the workings of the University of Paris and anx ous for its welfare, sends out a similar cry of warning and bewails the evils he would see remedied. He is opposed to any infringement of the old order. He does not like to see the colleges monopolize university instruction. "There are," he tells us, "sixty-three colleges or high schools in the University of Paris. These were not originally established for boarders, nor in order that the arts may be taught in them, as is done to-day, but to feed and maintain certain scholars whom the ancients called Bursars. These attended public lectures in the rue du Fouarre."8 He would see them return to the old custom. The regents are no longer adequately compensated. He tells us that the Jesuits brought about this ruinous system of gratuitous instruction, "and even the Jesuits do not teach gratuitously since they secure such good endowments for their colleges."4 He would, therefore, gladly see them expelled from Paris, and hints at what he considers the proper mode of treatment for them, by calling attention to the fact that "Carlo Borromeo took from the Jesuits the seminaries that he had instituted in the diocese of Milan." He bewails the fact that neither among themselves have the masters the proper spirit, nor over their pupils have they the same influence as of old; and if they are to do good as formerly they must reform their present mode of living and in submission to the statute of September 20, 1577, go back to commons.

The anonymous author finds fault with the manner in which the scholars are treated in some of the colleges. He has no good word for the harsh discipline to which the students of Montaigu College are subjected. He advocates the reduction of their num-

¹ Ibid., p. 29. I have modernized the spelling in these quotations.

² Ibid., pp. 30, 31. (A copy of this rare tract is to be found in the library of Columbia College, New York).

³ Memoires pour le Reglement de l'Université, MDCX, in the Bibliotheque Nationale, under the heading "Paris Université" (Generalités), 1073, 24, 115-2130, ⁵ Ibid., p. 6. p. 2. 4 Ibid., p. 3.

ber to a third of what it then was, so that they be better fed and better clothed—and that they wear "a dress more civilized and respectable than that they now wear." He bewails the neglect of lessons upon the holidays and feast-days. He says: "Twenty-five or thirty years ago lessons were taught in the university on feastdays and on Sundays, from nine to ten in the morning," and from four to five in the afternoon, and on the feasts of the Apostles there were public declamations—usance qu'il est necessaire re-The regents he finds derelict in duty: "Each regent should watch in turn over the scholars at play, in order to see that they behave with modesty and reserve, that they speak only the Latin tongue, and that they salute politely all who pass through the ground. He is dissatisfied with the preparatory schools of the university. They are not doing their duty, they are not grounding the children sufficiently. He tells us that there are thirty such schools in Paris, that the masters of them are frequently ignorant, and that they persist in carrying the children into other fields of study rather than confining themselves to the rudiments. In consequence, he complains bitterly of the difficulty of unlearning children what they had been badly taught, and above all of correcting habits of erroneous pronunciation."2 foundation can support only a poor superstructure. And what solidity can be found in institutions the principals of which are elected, not through merit, but as the result of canvassing and intrigue? Such was the state of affairs among the colleges of the University of Paris in 1610. Here we part company with the anonymous author, grateful for the glimpse he gave us into the causes that led to the disintegration of that wonderful structure.

The University of Paris had begun to decline in power and influence long before. In the beginning of the sixteenth century while there was slight diminution in the number of her students, a marked change was passing over her spirit. Her prestige was on the wane. She had ceased to be the seminary of Christendom and was simply a national institution. The causes of this decline were both local and general. In the fourteenth century universities were multiplied in nearly every country in Europe. Each nation—sometimes each province or district—possessing its own university, naturally students stayed at home and with few exceptions availed themselves of the universities established at their doors. The old-time severity exercised in the distribution of academical honors became relaxed and forthwith the degrees from Paris lost their primitive significance and were in consequence less eagerly sought. Finally, during the sojourn of the popes in Avig-

¹ Ibid., p. 21. ² Ibid., p. 22. ³ Ibid., p. 23. ⁴ Thurot, p. 2.

non, ecclesiastical dignities were showered upon the professors, who thereupon threw up their positions and their studies, and in consequence the work of the university was generally done by inferior men.1 Then as now is it true that personal worth and personal influence are the chief factors in determining the character and prestige of college or university. Now, as then, a great educator, or a great body of educators, can establish themselves in a barn and attract crowds, while the noblest architectural structures, with the most improved modern school-furniture, may proudly raise their spires, and yet, if directed by incompetency or mediocrity, will be passed by, or will be patronized by that class of parents which judges the merits of a school by the picture upon its prospectus.

Brother Azarias.

¹ The first Rotulus Nominandorum was sent in 1316 to John XXII. See Professor Shirley's introduction to Fasciculi Zizaniorum, p. 11.

HOW WORDS CHANGE THEIR MEANING—AN INSTANCE.

THE Catholic Church, unlike the sects which environ her, is in intimate contact with every subject of human thought. Theology, as the queen of the sciences, embraces all knowledge. Astronomy is hers which deals with those vast bodies before the contemplation of which the imagination reels, and stretches of time that may indeed be represented by figures, but whose immensity no human mind can grasp. She is no less at home in animal life. The ox, the ass, the wolf, the sheep, and the goat are used in her symbolic teaching. The ant is with her a type of provident industry; the bee, for eighteen hundred years, has supplied the wax for her altars, and has been a lesson to her children of orderly hierarchical government.

New sciences are springing up all around, and as they come into being they, one by one, fall into their allotted place in her divine plan of Christian thought. It is only in very recent days that the study of words has become scientific. To our grandfathers and those who lived before them, it was something very little, if at all better, than guess-work. They would have laughed at any one who should have told them that in the talk of the fireside, that was daily on their lips, there was, for those who knew how to conduct the search, a whole fund of history,—history stretching far beyond the reach of written records, which at points far too numerous to indicate here, came in contact with the Catholic Church, her sublime teachings and awe-inspiring ceremonial. We will illustrate what we mean by taking one example,—the word Hearse. It is no fitter for our purpose than scores or even hundreds of others which we might have chosen, but its curious history and strange fluctuations of meaning may perhaps have more interest for our readers than many another whose progress up to the present hour has been no less instructive.

Modern people, who have not devoted themselves to philological studies, know of but one meaning for the word hearse. They picture to themselves, when they hear it pronounced, a funeral car, with its trappings of woe and its nodding plumes. If they have visited the Netherlands or North Germany they may perhaps add to their mental sketch the white death's-heads and cross bones painted on the panels, and the driver in his long black cloak with a deep, wide,

quilted frill round his neck, such as we see represented in pictures of the time of King James I. This is, as far as we have been able to ascertain, the only sense in which the word hearse is now used by those who speak English.

Hearse may, like most of the other words which we use in every-day talk, be traced back to an Aryan root. We shall not, however, ask our readers to travel with us so very far backward up the stream of time. The most remote ancestor that we shall claim for our word is *Hirpex*, the Latin term for a rake or harrow. This word Hirpex, though not identical, was evidently near of kin to *Ericius* or *Hericius*, a hedge-hog, a term which was employed in a figurative sense by writers on the art of war to signify a military engine of the nature of a portcullis. In Cæsar's "Commentaries" we have "Erat objectus portis ericius," and Sallust says, "Eminebant in modum ericii militaris veruta binum pedum."

We have no clear notion of what was the exact form of the Roman Hirpex, but there is nothing in which mankind have been more conservative than in the form of their agricultural implements. We shall therefore probably not stray far from the truth if we assume that the harrows, of which we have a few representations in mediæval illuminations, faithfully represent the Hirpex of the days of the Cæsars. We are not aware that any of these illuminations have been reproduced by engraving or photography, but here the science of blazonry comes to our aid. An old English family, of the surname of Harrow, had for its arms three harrows, joined together by what the heraldic writers call a wreath, but which is, in truth, the iron ring or strong piece of rope by which it was the custom to fasten them together in triplets. An engraving of this shield is given in John Guillim's "Display of Heraldry." They are represented as triangular implements, having three bars running across, in which the tynes or teeth are fixed.

The word hearse was occasionally, but very rarely, used to indicate the agricultural harrow. Lord Berners, in his translation of Froissart's "Chronicles," published in 1523, says of a certain battle that "The archers....strode in manner of a herse, and the men of armes in the botome of the batayle." The first ecclesiastical use of the word is probably due to France, but we had it in early times in England. It signifies a triangular frame of wood, which was suspended by a cord from the roof of the church. It would seem to have been in form just like a harrow, but at the points where the bars crossed each other there were sockets in which to

¹ Lib. iii., c. 67.

² Fragm., lib. iii.

^{3 5}th ed., 1679, p. 214.

⁴ Vol. i., ch. exxx., p. 156.

insert candles. These hearses soon gave way, except perhaps in very poor churches, to chandeliers of metal; but the hearse only changed its position. It was taken down from above-head and mounted on a stand or post, and used in the service of *Tencbrae*. In this case it usually contained twenty-four lights, but the custom was not always the same. Sometimes it was made to contain fourteen yellow candles, with one of white wax in the centre. The yellow candles symbolized the eleven faithful Apostles and the three Marys, the white candle in the middle representing our blessed Lord. In the *Tenebrae* services of Catholic England, fourteen psalms were said. As each one was ended a candle was put out. When the time arrived that the white taper alone remained alight, it was concealed behind or near to the altar so as to leave the church in total darkness.

When the people had got accustomed to connect the word hearse with a frame for holding candles, it was but a very short step to take to arrive at the next meaning. When England was Catholic. it never occurred to any one that, except in the case of notorious evil livers who had died impenitent, a funeral could take place without prayers being said for the departed soul. In all cases the body was carried into the church and placed near or at least in sight of the altar. Over the body a light frame of wood-work was placed by which the pall was supported. These frames were a regular part of the church's furniture; at the corners, and sometimes on the ridge also, there were holes for candles To these frames the term hearse soon became applied. Of these wooden hearses, not a single example is known to have come down to our time. Such a thing indeed could hardly be expected. Their fragile nature would render them peculiarly liable to destruction, and they had become mere lumber when, as far as the state could do it, prayers for the departed had been abolished. Occasionally these wooden hearses were copied in metal and made permanent parts of the tombs of persons whose last resting-place was within the church. A few examples of hearses of this kind have survived the storms of upwards of three hundred years. A very graceful iron hearse of this kind still canopies the alabaster tomb of one of the Marmions in the church of Tanfield, near Ripon, Yorkshire. It has attached to it sconces for holding seven candles, two on each side and three on the ridge. A portion of another, of singularly beautiful design, is preserved in the museum at South Kensington. The effigy of Richard, Earl of Warwick, who died in 1439, possesses a hearse of this kind. It is smaller than those we have already mentioned, but is made of brass, or rather of that mixed metal which our ancestors called latten. The contract for making it still exists,

and it is noteworthy that it is therein spoken of as a hearse, showing that before the middle of the fifteenth century hearse had become the recognized term for these objects.

The next departure was to apply the word hearse to a temporary canopy of timber decorated with a profusion of tapers and draped with hangings and religious and heraldic banners, which was placed over the body during the funeral rites. It has been known in every country in western Europe, but England is, we believe, the only country which has called it a hearse. Chapelle ardente is the ordinary French term. We find castrum doloris in Latin, and catafalco in Italian.² When bodies had to be carried a long distance, it was the custom to erect a hearse of this kind in every church wherein it rested for the night. Minute accounts of several of these hearses have come down to our time, showing that in many cases they were very sumptuously decorated. They were, we may be sure, never in common use. Their costliness must have confined them to persons of the higher ranks, or people otherwise of great distinction. Chaucer knew these herses well; as he spent much of his life in court society, he must have seen them. In his Dream he has given a very beautiful description of the prayers which were offered up around them:

"And after that about the herses,
Many orisons and verses,
Without note full softly
Said were, and that full heartily,
That all the night, till it was day,
The people in the church can pray,
Unto the Holy Trinity,
Of those soules to have pity."

Though the persons who accepted what goes by the name of the Reformation were all but unanimous in rejecting the doctrine of prayers for the dead, yet with that remarkable inconsistency which is a distinguishing characteristic of so many of their actions, they retained the use of these sumptuous hearses. They seem, in post-reformation times, to have been used principally as a mark of social rank, and as a means of heraldic display. In 1589, a violent Puritan satire against the then existing order of things in church and state was issued at some secret press, bearing the strange title of "Pappe with a Hatchet," wherein the following passage occurs:

"Now you put me in minde of the matter, there is a booke coming out of a hundred merrie tales, and the petigree of Martin, setchte from the burning of Sodome, his armes shall be set on his hearse, for we are providing for his funerall."



¹ Parker, Glossary of Architecture, 1850, vol. i., p. 250.

² Rock, Church of Our Fathers, vol., ii., p. 496.

⁴ Ed., 1844, p. 17.

³ Ed., 1866, p. 402,

In William Habington's Castara we find the lines:

"Lily, Rose and Violet, Shall the perfumed Hearse beset,"

which is the only evidence that occurs to us of those hearses being decorated with flowers. That stationary hearses were in use at the funerals of the gentry as late as 1681, is proved by a sermon preached that year by a minister of the Established Church at the burial of Sir Alan Broderick. He told his hearers that the dead knight had made express provision in his will "that his herse should by no means be garnished with the usual ornaments of a family, and no escutcheon should either there or elsewhere appear." 1

The funeral car, or chariot, originally differed but little from these stationary hearses, except that it was upon wheels, and the necessities of the case required it to be smaller. We are not aware that these wheeled hearses were in use in Catholic times; however, they may have been, but it is probable that the bodies of all but the very great, if they had to travel far, would be conveyed in an ordinary wagon. The body of Colonel Rainborowe, who was foully murdered by royalist desperadoes from Pontefract Castle, on 29th October, 1648, seems to have been conveyed from that town to his burial place at Wapping, near London, in a hearse, and Milton, in his "Epitaph on the Marchioness of Winchester," when he introduces the word implies that it was a movable structure:

"Gentle lady, may thy grave
Peace and quiet ever have;
After this thy travel sore
Sweet rest seize thee evermore.

Here be tears of perfect moan Wept for thee in Helicon, And some flowers and some bays For thy herse to strew the ways."

Anthony Walker, a Protestant minister, preaching, in 1673, said that "more friends attend an hearse to the Towne-end than will drive through with it the whole journey"; and in 1690 they had become one of the necessities of civilization, for we find in that year an advertisement in the London Gazette offering them for hire.

We have accomplished our task, having furnished our readers with a sketch of the evolution of the word through the changes of the Middle Ages until its meaning had been settled as we know

¹ P. 18.

² Lees Lacrymans, p. 10.

it to-day. We must not conclude, however, without pointing to what we consider as a disease of language, not in any true sense a development. We mean the bad habit with more than one writer of the seventeenth century of using hearse in the sense of a dead body. We have before us an extract from Thomas Heywood's "Brytaines Troy," exemplifying what we mean, and other similar blunders might easily be found, but no good end can be served by reproducing them here or elsewhere.

EDWARD PEACOCK, F.S.A.

Scientific Chronicle.

CIPHER.—"UOaO&IOU."—(....).

WE have a vague recollection reaching back with uncertain gropings into the dimness of the distant past that the author of the above quotation was Dean Swift, but unfortunately we have not been able to lay our hand on the evidence. So we let it pass for the present, and jog on with our "Cipher."

The great modern Dictionaries open up to us whole mines of information anent the wanderings of this word, through various languages, since it was first set adrift on the stream of time, down to our own days. In these days of tall erudition, no word seems to have the ring of true coin unless its origin can be traced back to the Sanskrit.

Now, the learned in philological matters tell us that "Cipher" was written, in that somewhat ancient language, "Sunya," meaning "empty." Being thus a mere adjective, and poorly filled out at that, but yet, with prophetic eye, foreseeing doubtless all the buffetings it would have to endure in its long journey, it early applied for admission into the ranks of the "substantives," and had its claim allowed.

Poor "Sunya"; it has been battered and bruised a good deal in its voyage adown the ages; it has been beaten and broken, and rolled like a pebble in the torrent, till its sharp edges and angles have all been worn off, and it has become as round and smooth as an O. In the hands of the Arabs it grew thin, taking the form "Sifr" or "Sefr" (adjective and substantive) with the signification of "empty" or "nothing." Let us see now how it has fared among other peoples. Here is a partial list of its forms:

Danish,			Siffer.	Dutch, Cijfer.
Old Swedish, .			Siffra.	English:
Old French, .			Cifre.	Fourteenth Century—Sipher, Si-
Old Spanish, .			Cifra.	phre.
Portuguese, .	•		Cifra.	Sixteenth Century-Cyfer, Cy-
Italian,	Cifera	and	Cifra.	fre, Cifer, Cifre, Cifra, Ciphre,
Modern Spanish,		. 0	Chiffer.	Ciphra, Sypher, Syphre, Zi-
Modern French,		. (Chiffre,	phre.
				Eighteenth Century—Cypher.
				Nineteenth—Cipher.

We have noticed at times that some of our contemporaries have not even yet caught up with the nineteenth century spelling.

The sonorous and stately old Romans could never have admitted such

a barbaric word as "sifr," but they caught the sound, and it reminded them of their darling west wind, zephyrus, the zephyr, and so the poor little waif grew fat again, under the pompous name, "zephyrum." Not content with this the Romans superadded a new meaning, making the word signify, besides its original "nothing," a secret," or "an occult thing."

After that we have:

Modern I	Latin,	. ,					. Z	ifer	a—æ.
German,				Zifer,	Ziffer	(a nu	ımbei	, a	sigu).
Italian,					Zifero,	Zifro	, Zeí	ro,	Zero.
French,				**					Zero.
Spanish,									
Portugues	e,								Zero.
English,	•								Zero.

From "Sunya" then we get, through the lapse of unknown ages, to "cipher" on the one hand, and to "zero" on the other. Truly, it looks, after all, like a much ado about "nothing."

But though "cipher" and "zero" are fairly cousins, they agree only in one thing, and that is in "nothing." Whatever greatness the Romans may have wished to confer on their "zephyrum," its modern descendant, "zero," means "nothing," and nothing else. "Cipher," on the other hand, has usurped whatever the Romans intended for "zephyrum," for, besides clothing itself with many new meanings, it has, under one at least of those meanings, actually had the audacity to have itself elected to an honorary seat among the very verbs themselves.

- The word Cipher has finally come to signify:
- 1. (In Arithmetic and Algebra) "nothing," "naught," "zero," of which the symbol is o.
- 2. (Figuratively.) Something of no value.
- 3. A written character in general, but more especially a numeral character. In this sense the word is now rarely used, but from it we have the verb "to cipher," which, though avoided by certain ultrapurists, is as classical as any word in the language.
 - 4. A monogram; also a Coat of Arms, especially of women. (?)
 - 5. (a) A secret method of writing.
 - (b) The thing so written.
 - (c) The key to decipher the writing.

Having finished this rather long but we hope not entirely useless preamble, we arrive at the real subject of this article, which is: "Cipher," according to the definitions just given under No. 5 above.

There never was a time when men did not need to keep secret from some what they wished to reveal to others. This has been the case especially with kings, queens, statesmen, ambassadors, army and navy officers, and others in high stations. The result is easily attained when the persons concerned can meet face to face, and communicate their thoughts by word of mouth. But when this connot be done, it becomes

much more difficult. Recourse must then be had to writing, but it is evident that, when anything very serious is at stake, ordinary writing, which may readily fall into the hands of a third party, would not do. In that case it is necessary to have recourse to secret or cipher-writing. It is of a few of the kinds of cipher-writing which have been tried that the present article proposes to give a brief description.

The art of secret writing has been called Cryptography, from χρυπης (hidden), and γραφείν (to write); also Steganography, from στεγανης (covered) and γραφείν, and by many other names, but the word "Cipherwriting" may be used to embrace them all.

One of the early methods was that in use among the Lacedemonians. When a general was sent out to do a little fighting for his country, he was supplied with a round stick or staff which he preserved carefully, while the state authorities kept an exactly similar one at home. these latter wished to send any secret communication to their general. they wound a narrow strip of parchment spirally around the stick, from end to end, making the edges meet close together. Then they wrote along that line of junction of the edges, in such a way that the upper half of each letter was on one side of that line, and the lower half on the other. When unwound the writing consisted of broken letters, and in this state the strip of parchment was sent. On receiving it, the general wound it around his stick, and as it would fit only one way, he easily made the broken letters match again, and so read the despatch. This was certainly a crude method, and if, in other matters, the old Spartans had not done better, history would never have taken the trouble to record their exploits; for there would have been none worth recording.

The deciphering of a message written in that way, would be merely child's play. In the first place, there would not be the slightest difficulty in the world in rolling that strip of parchment so as to make the parts of the letters match, and that without the aid of the stick at all. We have tried it many times without once failing. In the next place, however it may have been with the abominable scrawls that stood for letters in those times and places, we certainly now, with either our Roman or Italic letters, would find little difficulty in reading from the upper half only, of a line of print or even of decent manuscript.

The Romans, too, had their methods, one of which was odd enough to deserve a passing glance just here. They shaved the head of a slave, and on the surface so prepared they wrote the message with a quasi-indelible ink. After the hair had grown again the slave was sent on his errand, when a second shaving revealed the message. For slowness this would be hard to beat, and yet it was beaten once to our knowledge. We are waiting yet for a letter that was addressed to us thirty-one years ago. If there were any secrets in it, they are doubly secret now, for the one who wrote is gone forever.

The historian, Polybius (204-122 B.C.), states that a still more ancient writer, Æneas Tactitus, had collected and described at least twenty different methods of secret writing, some of which he had invented him-



self. We have been unable to verify this statement, as the writings of the late Mr. Tactitus seem to be out of print. From that time onward cipher-writing has always been in use; but there is a very long gap in the literature of the subject. Treatises on the subject may have been written; it is hard to believe that there were none; if so, they must have been lost, and it is not until A.D. 1500 that we find any serious works thereon.

In that year the Abbot Trithemius, of Spanheim, published at the instance of the Duke of Bavaria his "Polygraphia" (many kinds of writing), of which six books were devoted to "Cryptographia," as well as a larger work entitled "Steganographia," substantially on the same subject. These works have served as the foundation on which nearly all subsequent works have been based.

The works of the good abbot were looked upon with suspicion on account of the many technical terms he used, so much so that one Boville caused them to be publicly given to the flames. Copies of them were however preserved, and later on men arose who had brains enough to understand them. The best and bravest of these, at a time when bravery was needed to defend the abbot and his works, were Blaise de Vigenere (Paris, 1587), and the Duke of Lunenburg (1624). They proved clearly, and, what is more to the purpose, they convinced their contemporaries that cryptography contained no magic, witchcraft, black art nor other diabolical mystery, but that it was a perfectly innocent and a very useful art.

Before either of these two, as early indeed as 1563. John Baptist Porta, the well-known mathematician of Naples, published a work of five volumes on secret writing (*De furtivis literarum notis*), but as he was far away from the scene of the abbot's trouble, he seems to have gone on his own way without bothering his head about the witchcraft question.

The much-extolled Francis Bacon (A.D. 1600) invented and used a number of ciphers, some of them very intricate. He gave a great deal of thought to the subject, and has left a good deal in his writings of very great interest. Among other things he lays down as conditions of good ciphers the following:

"The virtues required in them are three: that they be easy and not laborious to write and read; that they be safe and impossible to be deciphered; and that they be, if possible, without suspicion."

This is an ideal to which no cipher yet invented has perfectly attained; not even the ones invented by Bacon himself. We shall see some specimens further on.

John Wilkins, Bishop of Chester, in 1641; good old Father Kircher, of magic lantern renown, in 1663; Caspar Scott (or Gaspar Schott, S. J., if you prefer that spelling), the balloon man, in 1665, and hosts of others published treatises on cryptography for the use of kings, queens ambassadors, diplomatists, and gentlemen generally.

Others gave special attention to the art of deciphering secret writings. Among the best-known of these were John Falconer, in 1685; John Wallis, mathematician of Oxford, in 1689; John Davys, in 1737; Philip Thicknesse, in 1772; Professor Wheatstone, in 1858. The last-named succeeded in deciphering important documents from the pen of Charles I., which had resisted all attempts in that direction for more than two hundred years.

The best modern work on the subject is probably the "Krypto-graphik" of J. L. Klüber (Tübingen, 1809), in which the different methods of secret writing are carefully classified. It is in German, and by that sign you may know it is thorough.

We do not intend to re-edit all, nor indeed any of the above-mentioned works, at least, just now; but we would fain give a few specimens of some of the ciphers which have been invented up to date, so that those of our readers who have a need or a liking for such things, may be able to choose wisely and well.

I. Many of our common puzzles, made up of letters, parts of words, and pictures, partake more or less of the nature of cryptographic writing, but they are useless for any serious purpose, because they have no key, and it would be just as hard for the one to whom they might be sent to make out their meaning as it would be for any one else. Of this class we have, on the borderland between sense and nonsense, inclining strongly to the latter, such well-known examples as: IOU (I owe you); IXL (I excel); OIC (oh, I see); URMT (you are empty), etc. Also the quotation at the head of this article: "UOaO&IOU" ("you sigh for a cipher and I sigh for you"). The rebus, consisting of a series of pictures (sometimes eked out with a few letters), which suggest certain sounds, while the sounds in turn suggest letters or words, is of this class. Thus, venerable for its antiquity, comes up:



which, being interpreted, intends to say: "I saw a man drink a barrel of beer." There is only one thing missing from this cryptograph, and that is the man. Well, being of a retiring disposition, and feeling, perhaps, a little exhausted by his extraordinary exploit, he just lay down behind the barrel to think and rest. This is hidden writing, with a vengeance.

Picture-writing has always been in use among those who could draw, but who could not write because they could not spell, and thereby hangs a tale, which, in this connection, may be worth retailing. A certain man (out West) kept a store, and, as is usual in the village-stage of civilization, dealt in everything possible and impossible. He knew the use and value of the digits, 1, 2, 3, etc., but he could not spell, so he kept his accounts cryptographically. One of the items in his account with a farmer named Smith was this:

8 . . 2 . . 9 O,

which meant that he had sold to Mr. Smith (whom he designated as No. 8 among his customers), on February 9th, a cheese. Smith refused payment, and was sued. Having proved to the satisfaction of the court, by the testimony of his family and neighbors, that, instead of buying cheeses, he had manufactured and sold large numbers of them, he was acquitted. The storekeeper paid the costs. The majesty of the law having been satisfied, the farmer took the merchant aside and said:

- "Jim, if you hadn't been so 'tarnal fast, I'd 'av' paid you."
- "There," says Jim, "I knowed I sold you that cheese."
- "No, you didn't neither; but I do remember you sold me a small grindstone."
- "Gosh! I forgot to put the hole into it. Come and liquor up, but don't tell the boys."

Of course, the secret writing consisting of pictures interspersed with puns, and often very poor ones, is away down below the dignity of our high-toned civilization; yet it is not to be too lightly despised. In some of its aspects it bears a close relationship to that secret or sacred writing to which the Egyptians confided the history of kings and kingdoms, and which baffled the skill of interpreters, or would-be interpreters, for centuries upon centuries.

2. One of the many methods of writing used in Egypt of old was by means of pictures of familiar objects, each picture representing either a word, a syllable or a letter, as if we should make the picture of a lion stand for the letter "l," a bear for "b," a cat for "c," a tree for "t," and so on. Our modern nursery rhymes have a suspicion of this in them, as:

"A was an Archer that shot at a frog;
B was a Butcher that kept a great dog;
C was a Countess all covered with lace;
D was a Drunkard that had a red face."

The deciphering of the Egyptian hieroglyphics has opened to the world the history of one of the most wonderful peoples that have ever existed.

- 3. A trick, intended to convey messages secretly, and often used by prisoners, is to spell each word backwards. as:
- "Emoc ta enin kcolco worromot thgin. Ruo gnag lliw eb ydaer, dna nehw uoy kcatta no eht tsae edis ew lliw teg tuo yb eht tsew."

Of course it never succeeds, but they keep on trying it, all the same.

- 4. Another dodge is to agree with a correspondent on a certain page of a given book, of which each has a copy. Thus, Brown wants to send the following message to Jones:
- "The traitor will be with me at the cross-roads at ten o'clock. You know the rest."

To put this in cipher, Brown turns to the book and page, and finds that the 12th letter on that page is t; so he sets down the number 12. The 33d is h, the 5th is e, the 5oth is t, the 29th is r, the 26th is a, the 17th is i, the 69th is t, the 2d is a, the 58th is a.

He therefore gets for the first two words the numbers: 12, 33, 5, 50,

29, 26, 17, 69, 2, 58. Continuing on in the same way, he sets down a number for each letter of the message, and sends the list of numbers so made out. On receiving it, Jones has only to turn to the proper page of the book and hunt up the letter corresponding to each number. Should a needed letter not be found on the page, then the letter itself may be inserted in the cipher; for an odd letter here and there would not render the message intelligible to a person not in the secret.

This cipher seems at first sight to be endowed with two of Bacon's three "virtues," and yet it has its weak points. For a few communications it might answer, but in the case of an extended correspondence we think it would be liable to fail; for if the same page were used all the time, it would finally become worn, and as this cipher is not "without suspicion," the worn page would lead to discovery. If, on the contrary, a new page were frequently agreed on, this would lead to confusion, unless a dated record were kept of the changes, and this, falling into the hands of a detective, would again reveal everything.

5. One of the methods intended to give a cipher "without suspicion" is shown by the following example, taken from a book printed in Dublin in 1791:

"I shall be much obliged to you, as reading alone engages my attention at present, if you will lend me any of the eight volumes of the 'Spectator.' I hope you will excuse this freedom, but for a winter's evening I don't know a better entertainment. If I fail to return it soon, never trust me for the time to come."

This looks very innocent, but it is not what the fellow wanted to say at all. His friend was supplied with a piece of cardboard of the width of the written page and long enough vertically to cover the message. It had portions cut out, so that when placed over the writing, the only words left exposed were:

"I shall be alone at eight this evening don't fail to come."

This cipher is very easy to read when you have the key-card properly slotted, but it is terribly hard to write. The writer has, of course, a key-card identical with that of the receiver. This he applies to the unwritten page, and through the open spaces he writes his message. He then removes the card and fills in the vacant spaces in such a way as to make sense and "unsuspicious" English. This is extremely difficult, and, besides, those cards would, sooner or later, fall into the hands of an outsider, and then the cipher is deciphered. Moreover, this cipher contains a great deal of chaff for its wheat. In the foregoing example, framed by an expert, there are sixty-one words, of which fortynine are mere padding, while only twelve form the real message. Kings and queens are welcome to any comfort they may find in this system.

6. There is a well-known method of writing in such a way that it looks all right when read straight ahead; but when alternate lines are omitted, the sense is changed to what the writer really wants to say. The following, written by a soldier in a military prison during the late war, is a specimen:

"They are treating us very kindly here, and you would be surely pleased if you think it kindness to be treated like men, who can appreciate, and not like grovelling slaves. It is, indeed, as good as we could expect, and not as bad as you thought, or even worse, as some have not been ashamed to say."

Prisoners' letters are never without suspicion, and he would be a dull officer indeed who would not immediately see that the real meaning of the message is contained in the 1st. 3d, 5th and 7th lines only.

- 7. There are four methods which, as they do not differ in principle, we class under one head. They consist:
- (a) In representing each letter of the alphabet by another letter taken regularly so many places ahead, as d for a (the fourth letter for the first), e for b, etc.; or in working in reverse order, as in taking c for h (the third letter for the eighth), a for i, etc. This was the method employed by Julius Cæsar in his despatches from the seat of war.
- (b) In taking as cipher a letter as far from the end of the alphabet as the true letter is from the beginning, as z for a, s (the eighth from the end) for h (the eighth from the beginning), etc. The Jewish Rabbis made use of this method, and examples of it are said to be found even in the Sacred Scriptures.
- (c) In using for each letter any arbitrary sign, such as punctuation marks, short-hand letters, numerals, or what not, or any admixture of these. Cardinal Wolsey, the Earl of Stafford, and others in their time were deep in this system.
- (d) In writing the letters of the alphabet in any confused order whatever, and then taking the first of that list for a, the second for b, and so on. This cipher has been perhaps the most commonly employed by the majority of cipher-writers for centuries.

To write by the first and second methods (a and b) requires no key, but by the process of deciphering described below they may easily be translated. The third and fourth (c and d) require a key, but even they will not stand against a regular course of systematic guessing.

An example of the third class (ϵ) is given and deciphered in Poe's story of "The Gold Bug"; his method of deciphering, however, might, we think, be somewhat improved on.

In olden times ciphers were sometimes written in which spaces were left between the words, but this is almost surely fatal, because you then have the number of letters in each word. Now, in English the only words of one letter are a, I and O, and this gives a clue to a part of the key. In like manner, the most ordinary words of two letters are be, at, to..., and with a little guessing it is not hard to find which fits the best. No one now-a-days in writing a cipher, in dead earnest, would risk it in that way; the letters should be strung along without any breaks.

As an example now in deciphering a cipher of the fourth class (d), let us take the following:

m p l jlylqljfnbnmsilfplyilyzrdxvnuurjvmr mlxxmplsjblzjlmbmrmplsjlylislbnyvsmblxvripncclybmpnmmplkznybnulxkmlxxmplinxxlqlymrmplsjujslyvbplyzlujrimplhlosyysyoilypnqllyvlnqrjlvmrusyvbrililnybruinasyomplsjblzjlmbayrfymrnunqrjlvulffpsxlpsvsyompliujrinxxrmpljb.

In this we have 251 letters, and as in ordinary English there are, on an average, from four to six letters in a word, we have here probably from 50 to 60 words; this fact may be of some use later on.

Now, patient reader (and no others need apply), please lend a hand, and help us decipher this awful-looking epistle.

The first thing to be done is, of course, to find out how often each symbol has been used. Here is the result in the regularly decreasing order of number of times:

								7	limes.
The cipher lette	rlo	ccurs							44
66	m	"							23
46	y	66							21
66	р	"							17
"	Г	66							16
46	n	44							16
66	j	66				•			15
66	S	44							15
66	b	"							13
"	i	44			•	•	•	•	12
"	x	66							12
"	u	66							10
"	v	66	•						10
66	f	66					·		5
44	q	46		·		•	·	·	5
66	Z	"	,	•	•	•			5
44	0	**	•	•	•	•	•	•	4
"	a	44		•	•	•	•	•	2
44	c	44	•	•	•	•	•	•	2
66	k	66	•	•	•	•	•	•	
66		46	•	•	•	•	•	•	2
66	h	66	•	•	•	•	•	•	1
•••	d	••	•	•	•	•	•	•	I

Now, in a composition of reasonable length certain letters will recur frequently, others less frequently, others, again, very seldom. There will be some variation in the frequency of recurrence, according to the subject-matter, and also according to the style of the writer, if he have any; yet there will be less variation than one might at first suppose.

Poe, in "The Gold Bug," gives, as the order of most frequent recurrence, the following:

eaoidhnrstuycfglmwbkpqxz(jandvforgotten?).

Bailey's list is:

A list made out from a page of the QUARTERLY runs thus:

Bailey divides his list into eight group, as seen above, and says that though the order of frequency may vary somewhat, still a letter will rarely stray far from its own group. This statement is corroborated by the fact that our list, made from such good English as is furnished by writers in the Quarterly, is practically identical with his. The only letter which has changed its group is the w, having passed from the fifth to the sixth. But Poe is very far astray for several letters, especially in the case of the important letter t, which he places in the tenth place, whereas, even in the key which results from his own cipher, it turns out to be, just as in Bailey's and in our own, in the second place.

Let us now see what we can do with our cipher. The first column of the "Table," pages 868-869, is Bailey's list, as given above. The second column gives the different symbols of our cipher. The third gives the number of times each cipher-letter recurs. The horizontal lines marked (1) contain the total cipher. The remaining lines (2), (3), (4) show the gradual working out of the interpretation as explained in the subsequent notes.

				
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Notes on the Deciphering of mplj

Taking Bailey's probabilities as a guide, we replace the cipher-letter l by e, and m by l. This gives us the lines as at (2); and, after inspection, we see no special reason why it should, or should not, be correct.

The next cipher is y (occurring 21 times); it is probably a blind for a, o, n, or i. By inspection and counting, we find that by using a for y, we would get the combination ea 9 times (including eae once) out of about 60 words. Now whether ea be looked upon as a diphthong, or whether the e be taken as the final letter of one word and the a as the initial of the next in each case, this ea seems to recur rather too frequently. To translate y by o or i would be still worse. We rarely, if ever, crowd our vowels together after that fashion. Let us try something more probable. The next letter in group 2 is n. Substituting n for y all along, we get the reading as in line (3); it may or may not be correct, but we see no objection to it so far, and we are free to change it later on if necessary.

The next cipher-letter is p (used 17 times), and the unused letters of group 2 are a, o, i. If we translate p by a, and then run our eye along the lines (3) and count, we find that we would get the combination ae 11 times (9 times in tae and twice in aen). This does not look promising; neither does toe nor tie, 9 times, look healthy. We shall therefore leave a, o, i, provisionally, and pass on to group of r, s, h. This would give us either tre, tse, or the, 9 times. But tse, though possible, is hardly likely to occur so often; tre is frequent in English, but, at the very beginning of the line, it is followed by so many e's (tre ene e) that it does not seem to point to a rational result. Pass it and try h, by which we get the, than which nothing is more common, as in the, their, them, there, these, they Inserting h for the cipher p, we have the line (4), in which "hen" comes twice; where are the chickens?

Our next cipher is r (16 times), while of the key-letters, $a \circ ir$ and s are waiting for a chance. In nine cases this r stands alone (its companions being as yet unknown), so that it may be for a, i, o, or almost anything. But in two cases it stands between t and t and in one case between t and th, so that it could scarcely have been used for $r \circ d \circ c$, or, in fact, for any consonant. For then we would have trte or trthe, tste or tsthe, tdte or tdthe, tcte or tcthe, twte or twthe, and these are improbable combinations. Is is therefore more probably a vowel, so that we would have either tate, tathe, tote, tothe, tite, tithe, tute, tuthe, tyte, or tythe. The most probable of these is tothe, and under r = o the form "to the" we recognize it as a long familiar friend, whose hand we fondly grasp. Therefore we shall put o instead of the cipher r, and await results. The first result is shown in line (5).

Next comes cipher n (occurring also 16 times). Looking carefully along line (5), we notice nothing very striking till we reach a place where the hypothetical translating already proposed gives us th tthe, and an n above waiting to be translated and set into the gap. Evidently,

the only letter that will answer is a, making the reading that the (that the). Looking again along the line (5), we do not see that putting a for cipher n will introduce any incongruities, so we write line (6).

We now turn our attention to the cipher j (used 15 times), and the earliest unused letters of the list, viz., i, r, s, d,

If we put the i or the d in place of this j, we see that we will have at very commencement of the line such monstrosities as theirne or thedene, but r or s would fit very well, the result then being therene... (there ne...) or thesene (these ne...). Having counted up, on this hypothesis, we would have: r (or s) standing alone four times:

```
ore
      (or ose)
                  twice.
er
      (or es)
                  twice.
re
      (or se)
                  twice.
ro
      (or so)
                  twice.
or
      (or os)
                  once.
ret
      (or set)
                  once.
there (or these) once.
```

Now between these alternative readings there is very little choice. The difficulty of choosing is occasioned by the very briefness of the cipher message. Had it been an affair of 3000 words, or more, we would almost surely have fallen in with some combination showing clearly to which of the readings preference should be given. As we had not this advantage, we took the s, and worked along with it, till we saw it was doing mischief and leading to nonsense. We then turned back, blotted out the s, and introduced the r, with the result shown in line (7).

Scanning this line closely we see that the first two words must almost necessarily be: "There never," and if so, q must be translated by v.

Making this substitution all along we get line (8), in which we now find "even," "have," and the curious "eavore" and "avore." This "avore" has just one vacant place before it where the cipher u stands. What can fit there? Run through the whole alphabet, and the only possible letter for the place will be found to be either f or s. The one would give us "favore," the other, "savore." In either case the word must end in d, as "favored" or "savored." If we put s wherever the cipher u occurs, we shall have at one place "assordto," which can hardly be dissected into sense. Let s go, and try u = f f, which gives us "affordto" (afford to). Therefore, cipher u is very probably for f, and v almost certainly for d. Having tried them all along the line (9), our hopes are raised at least one full peg.

We notice next that the last cipher-letter of the message is b, and we see that its key-letter must be s, since nothing else is possible after "other." We notice also the recurrence of "the r," in fou places, and the cipher over the vacant places is s; the key

letter, if a vowel, must be i, because a, e and o have been already used up; and by trial we find that neither u nor y would suit for the other places where the cipher s is found. Neither would any consonant suit, for then, at a certain place, we would have a combination of five consonants, as "nd ts," in which the vacant place is to be filled by any consonant you please. But no such a sequence of consonants is possible in our language. Therefore we must fall back on i. Making s = ithe substitutions, cipher b = s and cipher s = i, we arrive at the result shown in line (10), of which a good part is intelligible, and another part may easily be divined. Thus "se rets" can be filled up only thus "secrets," and therefore the cipher z was used for c z = cNext the cipher x occurs twelve times; in four places it is x = ldoubled and preceded by te; thus we have "to te their secrets." i = mIt requires but little ingenuity to go to l for that cipher x, and make the reading "to tell their secrets." Another incomplete reading now starts up; "to their ene ies." The cipher-letter over that vacant place is i, and its key-letter is surely m. Make now these three substitutions and line (11) is the outcome.

In reading along this line you will encounter "hidin them," and it requires no great powers of imagination to put a tail-piece in the shape of a g, and get "hiding them." In another place, by putting o = gg for the cipher o, you will have "eginning" which must be h == b"beginning," and hence h was the cipher for b, giving us line f = w(12). d = uc == p It is unnecessary to argue further. A mere glance at this k = yline will make it evident that the translations suggested in the margin $(f = w, \text{ etc., } \dots)$ are the true ones. Supplying these we have line (13), which only needs word-spacing and punctuation to make it read:

"There neverwas a time when men could afford to tell their secrets to their enemies, and it seldom happens that they can safely tell them all even to their friends; hence, from the beginning, men have endeavored to find some means of making their secrets known to a favored few while hiding them from all others."

The order of most frequent occurrence, as found in this cipher, differs somewhat from Bailey's, and also from that found in the QUARTERLY.

We place the three together for comparison.

- (1) Bailey's: et. aoni. rsh. al. cwum. fygpb. vk. xqjz.
- (2) The QUARTERLY's: et. anio. srh. ld. ucm. fpqywb. vk. (xqjz).
- (3) Our cipher: et. nhoa, ris. ml, fdwv, cgkpy. bu. (xqjz).

The letters xqjz are given as the most rarely used, on the authority of our guide (1), and, curiously enough, they do not occur at all in either (2) or (3). But, in spite of the discrepancies between (1) and (3), still by means of that guide we got a start, and then, by a selective use of "probable," "more probable," and of a large modicum of patience, little by little we found the thing growing onwards towards fitness and sense.

This *simple* kind of cipher-writing may always be deciphered by similar means, provided there is enough of it.

A curious question intrudes itself here. What kind of certainty have we that the interpretation given above is correct? Or, better, suppose that we had a whole book printed in cipher, and that, by the means just adopted, we had turned it into good English, readable, connected, sensible; what reliance would we place on the result? The deciphering is founded on a heap of possibilities, if's, perhaps's, probabilities (more or less strong), may-be's, etc., and no single item of certainty in the whole affair. How, then, can the result be certain? And yet you feel that it is certain, and very certain; and you would condemn a fellow-being, and hang him, on evidence no stronger than this. It has been done time and time again, if history tells the truth. We would feel so certain of the truth of our results, in the supposed case, that should a few discrepancies occur here or there, we would attribute them to an error on the part of the writer, and then proceed to correct the cipher itself. If, on the other hand, the interpretation be not certain, then please tell us what certainty there is in nine-tenths of all the things which we pretend to know? We pause for a reply.

"The most famous and complex cipher, perhaps, ever written, was by Lord Bacon," so says a commentator. But let us hear Bacon himself.

"For avoiding suspicion altogether, I will add another contrivance, which I devised myself when I was at Paris in my early youth, and which I still think worthy of preservation. For it has the perfection of a cipher, which is to make anything signify anything; subject, however, to this condition, that the infolding writing shall contain at least five times as many letters as the writing infolded; no other restriction or condition whatever is required. The way to do it is this: First, let all the letters of the alphabet be resolved into transpositions of two letters only. For, the transposition of two letters through five places will yield thirty-two differences, much more twenty-four, which is the number of letters in our alphabet. Here is an example of such an alphabet:

aaaaa st	ands for			\mathbf{a}	abbaa stands for			Π
aaaab	66			b	abbab "			o
aaaba	"			c	abbba "			р
aaabb	46			d!	abbbb "			q
aabaa	"			e	baaaa "			E
aabab	"		•	f	baaab "			S
aabba	66			g	baaba "			ŧ
aabbb	44			h	baabb "		u and	v
abaaa	44		i and	i	babaa "			w
abaab	"			k	babab "			x
ababa	"			1	babba "			y
ababb	"	·	. 1	m	babbb "		•	z

Now, suppose you want to inform some one that "All is well." First place down the letters separately, according to the above alphabet:

a l l i s w e l l aaaaa, ababa, ababa, abaaa, baaab, babaa, aabaa, ababa, ababa, Then, take a sentence five times the length in letters of "All is well"—say it is, "We were sorry to have heard that you have been so unwell." Then, fit this sentence to the cipher above, like this:

a l l i s w e l l aaaaa, ababa, ababa, abaaa, baaab, babaa, aabaa, ababa, ababa, ababa, we were sorry to hav e heardtha tyou have been so un zeell.

Mark with a dot (if the communication is in writing) or italicise (if in print) every letter that comes under a δ . Then copy out the sentence so marked and send it. The person who receives the cipher writes an α under every letter that is not marked, and a δ under the marked ones. He then divides the cipher so obtained into periods of five letters, looks at his alphabet (i.e., the key), and finds the meaning to be, "All is well."

The "infolded" writing in this example is "All is well"; the "infolding" is: "We were sorry, etc."

For the above quotation from Bacon we are indebted to Ignatius Donnelly's "Great Cryptogram," p. 506-509.

This cipher is without doubt difficult to be deciphered; for the sake of peace we may even admit that it is "impossible to be deciphered"; but does it really "avoid suspicion altogether?" Has it indeed "the perfection of a cipher?" Is it true that there is no restriction in it except that the "infolding writing shall contain five times as many letters as the infolded?" Bacon thought so in his youth, and stuck to it in his mature years, and yet he was clearly mistaken.

The other necessary restriction is, that certain letters in the "infolding writing" be marked; and that settles it. Suppose, for instance, that some one had sent to Bacon an epistle containing a number of marked letters, and that this were intercepted and fell into the hands of the sovereign. Bacon would be sent for, and the following dialogue would be held:

Sov .- "Sirrah! what means this letter?"

Bacon.—"Your majesty has read it. Is anything wrong?"

Sov.—"Wrong? Ay, seest thou not these marks?"

Bacon.—"It is a fantasy of the writer, who writes not our language well."

Sov.—"Too well. This is a cipher, and unless thou deliver to me, before the setting sun, the key by which 'tis read, thou goest to the block."

And the upshot is, "tails, I lose; heads, you win."

No, we do not believe there ever was a cipher which was "impossible to be deciphered" and at the same time absolutely "without suspicion" and "easy to read and write."

The "impossible to be deciphered" may mean two different things: first, that the cipher cannot be deciphered without the key. In this sense, Bacon's method may perhaps give a cipher which cannot be deciphered. It may mean, secondly, that the key itself can be so effectually guarded that it will never fall into unauthorized hands. In this sense

Bacon's method clearly fails, and it is, moreover, exceedingly cumbersome.

Leaving aside the question about its being "without suspicion," which is of little consequence nowadays, we want a cipher which will have the other two "virtues" to perfection. For this purpose we need a key small enough to be carried in the head, and which cannot be discovered by any process of guessing. To write and read it should, moreover, be reasonably easy. We think there is such a cipher; it has existed for a long time, but we have not been able to learn by whom it was invented.

To begin, write out, or, preferably, have printed in good, heavy type, a table, as follows:

anorous Landa octors マュウム の日日 二米一二五郎 ショウい rabong Trunka he do TOPONE "KT" " PSS TO OLO I A GT OG OF WELLY TE E O TE Chong Trings he do ce Choole Harming to the Const adoder skr...xx Ecodor Arong Truman tedeove TORETHOLDS TO DO CO Nation of Artical Er - E = 0 PC- × + = > > * d u t s t d d o u g T x x тю fe дс ба к x қ < ц t s т g б о п g Т к т т トミーシェ ほこうひりょう コロマダ **との むっ りょく オール・トー とっしゅ コードー・ ける** - 84.....メー 6 4 0 スワンのション C ひゅ x X X X X X Z D O D B J X J P 25 4 opec stally a product stay axx at ひりん さんじじんり はにっかりに ちょう ツメアスロ A X X < C L S L C D O D B L K L . . . AM L G C C D B

To avoid ambiguity and repetitions, we shall, when referring to this table, call a vertical line of letters "a column," and a horizontal line "a row." Also, we shall call the left-hand column (outside of the heavy line) the "key-column," and any letter of that column, a key-letter. We shall call the top row above the heavy line the "text-row," and any letter of that row a "text-letter." The letters enclosed within the heavy rulings are "cipher-letters" or simply "ciphers."

This being premised, next agree with your correspondent on a word to serve as a key—a fairly long word which no one could guess, but which neither of you could forget. It need not even be a word; a sentence, or any sequence of letters, which will not be forgotten, will do even better, for then the chances of its being guessed are reduced a hundred fold. As an illustration, let us take, in this year of grace, for key-word the name "Columbus."

Now, write your message in any language that you both understand, and over it, making letter correspond to letter, the word Columbus, as often as necessary, thus:

```
Key.—Columbus, Columbus, Columbus, Columbus, Co
Text.—Ikno waba, nkwhereo, nthewild, thymegro, ws
Cipher.—lzzjjewt, qziertzh, qitzjkgw, wwkhrimh, zh
```

How did we get the cipher? Thus: Take the "table" and find the first letter (c) of the key, in the key-column; then find the first letter (i) of the text in the text-row; now follow (to the right) the row which begins with c, until it intersects the column which begins with i; at their junction will be found "i," and that is your first cipher-letter.

Continuing on in the same manner, we get the cipher as above. It does look somewhat tough, but by using his "table," your correspondent will have no difficulty in deciphering it.

First, he will write the word "Columbus" over it as often as necessary, thus:

```
Key—Columb... etc.
Cipher—lzzj.jc... etc.
Text—iknowa... etc. (to be found).
```

Secondly, he will look for c in the key-column, and then run along from it horizontally till he strikes "!"; at the top of the column in which he found that "!" will be the letter "i," i.e., the first letter of his text.

Thirdly, in the key-column he looks for o, and from that point runs

across till he strikes "z;" at the top of this column he sees "k," the second letter of his text, and so on to the end.

Of course, after copying out his cipher-message, the sender will destroy the key-word and the text, i.e., all evidence of the process by which the cipher was built up; and the receiver should do the same on his part. "Dead men do not tell any tales," neither do burnt manuscripts.

What are now the advantages of this system of cipher-writing? Mainly the following:

- 1. This cipher is quite easily written and read—much more so, indeed, than most others which we have seen.
- 2. It is concise, since every letter counts; there is no padding or dead weight in it.
- 3. The key-word need not—indeed, should not—be kept in writing. It can be kept in the head, and need never be changed. The "table" reveals nothing.
- 4. We believe this cipher cannot be deciphered. This point deserves examination.

The recurrence of the same cipher-letter for the same text-letter does not take place here except accidentally, and an accidental coincidence furnishes no clue. In the short example given above "i" in the text becomes "i" in the cipher at one place and "i" at another. Also, "i" becomes now "i", "i" now "i", "i" becomes "i" and afterwards "i"; "i" becomes "i" and "i" is replaced by "i," by "i," by "i," and by "i." Had the message been longer, each letter of the text would have been represented by a still greater variety of cipher-letters. A queer case arose in the beginning of a sentence which we were trying with a different keyword. The resulting cipher was the eleven letters: "i" i0" i0" and i1" and i2".

Now, sorely-tried reader, what would you do with that? It is a genuine cipher, but we would be willing to risk the fortunes of all our nearest relatives that no one can ever decipher it without the key. Please try.

The method of deciphering made use of on pages 868, 869, is, therefore, absolutely useless for this kind of cipher-writing. It is this continual shifting of the value of each letter of the key-word, baffling, as it does, all attempts at anything like systematic conjecturing, that gives this cipher its chief virtue, and renders it, we may say, undecipherable. If it can be deciphered at all, it can only be by finding out the key-word by pure guessing. What chances are there of succeeding in that?

Those of you who have the misfortune of being rich make use, doubtless, of a safe having a "combination lock." If there are 50 numbers on the knob, and three combination wheels within, the chances of any one's guessing your combination are as 1 to 50°, or as 1 to 125,000. Under these conditions you feel that your valuables are safe, at least from any attempt to get at them by guesswork.

Now, the cipher we have been considering consists of 26 letters, and if the key-word is as long as "Columbus" (8 letters), the chances of guessing that key-word would be as 1 to 26°; that is, as 1 to 208,845,-344,016. Is that safe enough?

If not, take as key-word a sentence of say 16 letters. The chances will then be as 1 to 43,616,377,717,161,387,008,256, and, on our part, we would be content with that.

But if one were determined to have the very highest degree of safety from the "table" as we have given it, he need only take a line of 26 letters from some obscure poet (there are plenty of them), write each word of the line backwards, and use the sequence of letters so obtained for his key-word. He could not forget the line of poetry, and by using it as directed the chances of discovery would become as 1 to 6,157,736,-328,465,319,832,910,113,650,084,560,896.

To any one who can grasp the meaning of six undecitions, even leaving out the small fry that follows, this ought to be conclusive, and we therefore think that unless some new means be discovered of finding out the key, this method of cipher-writing gives us a practically undecipherable cipher.

Since the above was written we have come upon a review of a new work on cryptography, entitled "L'Art de Chiffrer et Déchiffrer les Dépêches Secrètes," par le Marquis de Viaris. Paris, 1893. 175 pp. 8vo.

This "Art of Cipher-Writing and of Deciphering Secret Despatches" is, the reviewer tells us, a critical examination of about everything that has been written on the subject from time immemorial.

The Marquis of Viaris also explains a new method, invented by himself, which consists in the simultaneous use of six hundred alphabets. These alphabets are obtained by systematic permutations of the ordinary alphabet. The author claims that his cipher is absolutely undecipherable. It ought to be, and one would be tempted to imagine that it would be, at the same time almost absolutely un-write-able; but of this we cannot judge until the work has found its way across the ocean.

T. J. A. FREEMAN, S. J.

NOTE ON THE LIFE-SAVING SERVICE.

SINCE the July number of the REVIEW was published, some new statistics, concerning the work of the "Life-Saving Service," have come to light. We place them side by side, with the results already given, in order to show that the gallant band is still at its post, and doing its duty as nobly as ever:

Property	endan saved,	dangered, ved,			1889-90. \$7,617,435 5,510,945	1890-91. \$7,020,805 5,783,960	1891-92. \$8,352,335 7,174,475	
44	lost,				\$2,106,490	\$1,236,845	\$1,177,860	



Lives endan " saved,	- ,		1889-90. 3523 3475	1890-91. 3531 3481	1891-92. 2923 2896
" lost,.	•		48	50	27
Proportion saved. Property, Lives,	:		Per cent. over 72 ½ nearly 98 ½	Per cent. nearly 82 1/3 nearly 982/3	Per cent. nearly 86 over 99

As we shall not have occasion to return to this subject, we give, as a final medal of honor, the condensed record for the last twenty-one years, i.e., from 1871 to 1892:

Property	endange saved,	red,	:		:			:				,710,319 ,821,457
"	lost,									•	\$25	,888,862
Proporti	on saved,					•	•			ove	r 75	per cent.
Lives en	dangered	,										52,843
" sa	ved, .	•	•	•	•		•	•	•	•	•	52,216
" los	st, .										•	627
Proporti	on saved,									near	ly 99	per cent.

We leave all comment to the meditations of our benevolent readers. T. J. A. Freeman, S. J.



Book Notices.

THE PHYSICAL SYSTEM OF ST. THOMAS. By Father Giovanni Maria Cornoldi, S. J. Translated by Etward Heneage Dering, translator of "On Universals" and "Political Economy," etc. London and Learnington Art and Book Company. New York, Cincinnati and Chicago: Benziger Bros. 1893.

Speaking of the corrupting influences of positivism and materialism manifested in the teaching of the Italian school, the author adds: "If in our Catholic schools the physical sciences were rightly and fully taught the evil would be less." This is a very profitable thought and applies not only to Italian schools but also to most of the public and private (non-Catholic) schools of our own country. In the schools referred to positivism and materialism are fully entrenched and are continually and subtly undermining the very foundation of faith. The author further adds, in effect, that many who have a great reverence for the wisdom of the Angelic Doctor and declare without hesitation their adherence to his doctrines know too little of the fundamental questions that belong to physics. Hence, many have confused ideas about these questions, and are, therefore, liable to be deceived by the sophisms and the authority of men who pass as wise and learned in such things. Hence, also the necessity to place before the public, and especially the Catholic public, the principles of the physical system certainly upheld and strongly advocated by St. Thomas. How applicable to our own country and the present time! Protestant institutions of learning, the popular literature of the day, the secular press-all abound in pseudoscientific instruction and information. Our Catholic people must necessarily come in contact with this false teaching whether of the school, of books or of the press. The issue must be met, and the true will overcome the false. If Catholic educators (we use the term in its most general sense, including the clergy and all other leaders of Catholic thought) would seriously consider the tendencies of modern thought in this one respect, namely, the effect of present scientific training upon our own people I think a new impetus would be given to the study of science, and that from the highest Christian standpoint available.

NATURE.—Chap. iv., p. 21.

Passing over the preliminary discussion of the Materia Prima and Substantial Form for the reason that it may be considered too abstruse for the general public, though essential for a thorough understanding of the rest of the work, yet, perhaps, our present idea may be sufficient for what follows. You can scarcely hear a lecture on any scientific subject or read any book treating of the same without hearing or seeing nature spoken about as if it (she) were a sentient, intelligent being. How common such remarks as these: "It is a wise provision of nature," "Nature adapts means to ends," "Beneficent nature," etc. Ask the lecturer to define nature, and mental confusion ensues. It is very necessary to have clear ideas of nature, the very opposite of indefiniteness. If there were no other reason, the Catholic definitions concerning man and, above all, concerning the Divine Word Incarnate ought to be sufficient (p. 27). St. Thomas gives no uncertain sound. His definition is full and complete. "Nature is the first principle of motion and of

rest." This may not seem at first either full or complete. A careful study of chap. iv., however, will be found convincing. At least, let us away with attributing to nature an intelligent personality.

ATOMS.—Chap. vi., p. 37. The Present Atomic Theory.

All material substances are composed of minute particles called molecules. These molecules possess the qualities and properties of the mass of which they are a part. Molecules are divisible into smaller particles called atoms. Atoms are indivisible, and are the ultimate particles that enter into chemical union. Atoms cannot exist in a free state, that is uncombined. Molecules can exist free, uncombined. Another definition of molecule is: a molecule is the smallest particle of matter that can exist by itself. For example, a molecule of iron is the smallest particle of iron can exist as iron.

You will observe in the above brief abstract of the atomic theory no attempt to explain the inherent properties or qualities of either molecule or atoms, no attempt to show why it is that they act as they do; there is no accounting for life. All is bare and crude and a confession of ignorance. Even the distinction between the atoms of organic or inorganic substances is ignored. Indeed, there has been a feeble attempt to show that there is no difference.

Now, contrast the modern atomic theory with that of St. Thomas. The Angelic Doctor in effect says the atom is indivisible but not necessarily minute. It (the atom) has individuality; its indivisibility is not absolute but relative (read p. 37.). Therefore, an individual corporeal substance is continuous, consequently an atom. The human soul is the substantial form of man. It cannot in itself be divided or separated. Now, coupling the above with St. Thomas's idea of Materia Prima and the Creation his definition not only includes organic but inorganic atoms and the principle of life. The trouble with modern scientists has been to account for life and intelligence. With a grand flourish of trumpets they announce that they have proved beyond a question the indestructibility of matter and force; hence no necessity for a creator. When they are asked to explain the existence of intelligence, there is a great silence. We have sometimes questioned men who stand high as scientific leaders, "Is intelligence potential in matter or something superadded to it?" The subject is generally dropped right at this point.

Professor Tyndall intimates in one of his lectures that life and intelligence may be potential in matter. This is his illustration. Most persons residing in the Torrid Zone have never seen water in its solid condition, that is, crystalline. These persons are perfectly familiar with liquid water and have some knowlege of gaseous water, but talk to them of solid water and they were amazed. Yet let some of the water in their immediate locality assume the gaseous form and be wafted to the northward at a certain distance from the Torrid Zone, and at a definite temperature the polar or crystalline forces will come into action, and that water which was gaseous now descends in the beautiful crystalline form of snow. This crystalline form was undoubtedly potential in the water in the Torrid Zone. So, perhaps, life and intelligence may be potential in matter, but at present beyond our ken.

The above is Tyndall's idea in our own language, and is the very best attempt at the answer to the question to the materialist, "Whence life and intelligence?" To such extremes are they forced. Another

thought in connection with this subject; most persons of even ordinary education who have given the matter any consideration at all have concluded that the idea of conservation of energy, of potential and dynamic force is peculiarly the discovery of recent times. The enunciation of this doctrine has been heralded far and near as one of the most important principles of modern physical science. Let us consult St. Thomas, p. 18: "Some things that are not may be, and some already are. That which may be, but is not, is said to be in potentia. That which already is, is said to be in actu. The being of a thing is two-fold—essential or substantial, such as being a man, etc."

One cannot read the above quotation in full without perceiving that St. Thomas not only had the very clearest concept of potential and dynamic operations of force or energy, but he also gives this idea a scope far, very far, beyond the modern idea. A scope which must sooner or later be enunciated by modern lights. This may happen even in our day. It certainly will be given prominence in Catholic teaching.

ATTRACTION.—Chap. ix., p. 69.

The writer has often said to his friends that one of the most mysterious of natural phenomena (in one sense all natural phenomena are mysterious) is the attraction existing between a magnet and iron. We have held the iron some distance from the magnet yet within the magnetic field. We have measured the pull of the magnet at this distance. We have varied the distance and thus discovered the law of the attraction. We have interposed various substances between the magnet and the iron and yet the pull—the attraction as strong as ever. We have used strong electromagnets placed against the inner wall of the lecture room and the attraction acting through the mortar and the brick has held large masses of iron against the outer, the exterior wall of the building. thus seems to act where it is not. We have said, gentlemen, here is a fact, explain it who can; we cannot. We call it magnetism but we are not out of the difficulty. We have only named it. What is magnetism? What is attraction? This was the state of our mind till we read chap, ix. I am amazed to find that this attraction, the explaining of which has baffled so many learned men of the nineteenth century, was so clearly apprehended by St. Thomas and so conclusively elucidated. Verily we moderns need to sit at his feet and learn first our own ignorance, then in simplicity and faith apprehend the wisdom of the Angelic Doctor. After defining immanent and transient action and clearly distinguishing between the two, after illustrating completely the mode of action of animate and inanimate matter, after demonstrating the action of the soul on and in man, the author says: "Therefore it is easy to conceive how a body even though inorganic can in virtue of its own substantial form be transported from one place to another" (p. 73). "Since the order and beauty of the corporeal universe depends on the reciprocal operations of corporeal substance and these cannot operate without approaching; therefore to all of them, an inner inclination is given called universal gravitation by which they tend towards each other."

ETHER.—Chap. xxi., p. 170.

Behold now another of the vaunted results of modern research, the modern theory of luminiferous ether.

Theory of To-day.

It has been proven by numerous experiments in the propagation of

waves of sound through various media that the velocity of these waves is directly proportional to the square root of the elasticity of the medium and inversely as the square root of the density of the medium. The enormous velocity of the waves of light (185,000 miles per second) are therefore only possible in a medium which is almost infinitely elastic and at the same time almost infinitely rare. Further, it cannot be attenuated air or gas, since the waves of light pass without retardation through the most complete vacuum which we can produce. Scientists therefore have recourse to the concept of a medium of extreme elasticity and tenuity which is supposed not only to fill interplanetary but also intermolecular space, and this medium they call ether. Without this hypothetical ether the phenomena of light are inexplicable.

Let us consult again St. Thomas. On reading page 170 you will perceve that the idea of an ether filling interplanetary space is not a modern idea. The old scientists saw clearly the necessity for this hypothetical ether and they defined its existence mainly on account of the same needs and for nearly the same reasons as advanced at the present time. There are now difficulties in this hypothesis. Only a short time since I read a pungent article by Prof. Cooke of Harvard College, concerning these very difficulties. Now these very same objections were known and admitted by St. Thomas. The angelic doctor admitted the existence of the ether, judged light to be not a substance (in this respect in advance of the emission theory upheld by Newton), believed light to be a quality (see his definition of qualities of matter), derived from the luminous body in the ether and that the ethereal medium is necessary for seeing the object far or near. He further alleged that ether transmitted heat. In this connection read the conclusion on page 176.

LEHRBUCH DER THEORETISCHEN PHILOSOPHIE. AUF THOMISTISCHER GRUNDLAGE. Von Dr. Virgil Grimmich, Benediktiner von Kremsmünster, Professor d. Philos, and. Theolog, Hauslehranstalt zu St. Fabian. Freiburg in Breisgau. Herder'sche Verlagshandlung. 1893. Received from Herder, St. Louis. Pp. xv., 565. Price, \$275.

It is much to be regretted that Dr. Grimmich did not make the Latin instead of the German language the vehicle for bringing his course of philosophy before the general public. We do not believe that even students having a command of German will profit as much by his work in its present garb as if it had been given them in the original medium of Thomistic thought. Certain it is that no reader who is not thoroughly conversant with scholastic Latin can understand any single section of the book, for its terminology is generally expressed in Latin, or Germanized Latin, whilst its pages bristle with citations from the original works of St. Thomas and the other great schoolmen. On the other hand, had the course been published in Latin it would have been of service to a very much larger class of readers than is able to profit by it in its present dress, and would have received that universal recognition which it deserves. As it is, we must content ourselves with welcoming an excellent text-book of which a very limited number of students can make use.

The work on the whole follows the ordinary lines and matter of the Neo-scholastic philosophy, with here and there an exception. The treatise, for instance, on Method, embracing Definition, Division, Demonstration, finds very properly a place in Material instead of Formal Logic, and Noetics is interposed between Methodology and Critics, the latter subject making the last section of Material Logic. A very useful,

and altogether original, section of Noetics is given to show how the foundations of Logic, Metaphysics, Ethics, Æsthetics rest upon the scholastic theory as to the genesis of human knowledge. In vexed questions, for example, that which regards the nature of the distinction between Essence and Existence in creatures, the author adheres firmly to the Thomistic teaching, which is apparently that of St. Thomas.

Dr. Grimmich is too thoroughly a philosopher not to realize that the old philosophy must offer a radical solution to the problems raised by the new science. He is therefore careful to show how the peripatetic theory as to the essential constitution of material substance, when rightly interpreted, is quite in harmony with, nay complementary to,

the teaching of the physical sciences.

Darwinism, pure and simple, he of course refutes, but he contends that a theory of evolution which maintains immanent potentiality and finality, together with God's adminstrative providence, is well in accord with the mind of St. Augustine and St. Thomas. Another excellent feature of the book is a very full glossary explaining the scholastic terminology with special reference to the body of the work.

All students of philosophy who have the mastery of its language will find this manual of genuine service. Though much condensed, clearness is in no wise sacrificed to brevity. The contents of St. Thomas's philosophy are well elaborated, whilst numerous references to cognate

literature point the way to larger gleanings.

SELECT WRITINGS AND LETTERS OF ATHANASIUS, BISHOP OF ALEXANDRIA. -Edited, with Prolegomena, Indices, and Tables, by Archibald Robertson, Principal of Bishop Hatfield's Hall, Durham, late Fellow of Trinity College,

This forms the fourth volume of the "Select Library of Nicene and post-Nicene Fathers," under the editorial supervision of Drs. Schaff and Wace. The labor of editing St. Athanasius has been committed to very competent hands. Mr. Robertson deserves great praise, not only for the labor and devotion bestowed upon his task, but also for the care and respect with which he has treated the previous labors of Cardinal Newman in the same field. Referring to Newman's translations of the Four Discourses against the Arians, which he incorporates, Mr. Robertson observes: "The copious and elaborates notes and discussions which accompany it, have always been acknowledged to be a masterpiece of their illustrious author. The modern reader sits down to study Athanasius, and rises from his task filled with Newman. Like all the works of Newman included in this volume, translation and notes alike have been touched by the present editor with a reverent and sparing hand. The translation, which shows great care and fidelity, coupled with remarkable ingenuity and close study of characteristic phrases and idioms, has been, with two exceptions, but little altered. These exceptions are: (1) the substitution throughout of 'essence' for 'substance, (2) an attempt to remedy the most unfortunate, though not unconsidered, confusion of γεννητός and γενητός under the same rendering, 'generate.' A good rendering for the latter word and its cognates is indeed not easy to find; but it was felt impossible, even in deference to so great a name, after the note in Lightfoot's Ignatius, to leave the matter as it

We draw attention to this passage, not for the purpose of entering into the merits of a subtle distinction, which concerns the general parlance rather than Newman, who took the words as he had found them-but in order to show our author's "hesitation in touching, even to this slight extent, the works of John Henry Newman." The confidence thus inspired in Mr. Robertson's wise conservatism, is increased by the religious tone of his remarks throughout, and by his evident sympethy with his saintly hero's doctrine and character. Flaws may be noticed here and there, especially wherever the obnoxious Papacy comes within the field of vision; but this is always discounted in the work of an Anglican. All that can be demanded of a Protestant translator is that he give us the pure text of the ancient Fathers with the care and fidelity of a Newman, and not overburden it with his subjective views. It is an immense advantage to the Catholic controvertist to be able to quote the Fathers in the vernacular through the medium of a Protestant translation. This is especially the case when the translation has been so carefully and ably made as in the present instance. We therefore give the work the heartiest of welcomes, and pray that it be extensively read and studied.

ELEMENTS OF ECCLESIASTICAL LAW. By Rev. S. B. Smith, D.D. Vol, I. Ecclesiastical Persons, Ninth Edition, New York: Benziger Bros.

The fact that nine editions of this book have appeared since 1877 is a sufficient proof of its excellence. If the work were one of general interest such a demand would be very complimentary, but when we consider that its patronage is limited to ecclesiastics, we must be convinced that only real excellence could create such a demand. The work has been improved with each edition. The highest recommendations that can be given to any work have been given to this one in its former editions. A theologian to whom the late Cardinal Newman presented it for examination thus sums up its excellencies: 1. It gives just what is necessary for our times and circumstances. 2. It follows the best order and form, placing the common law of the Church first, and then the special law, and following the catechetical form. 3. It quotes the best authorities; it has been examined by Cardinal Simeoni's consulters; and it has been corrected and improved at their suggestion. 4. Its value is much increased by frequent reference to the Schemata Vaticani Concilii, on proposals made by bishops to bring about a revision of the Corpus juris. 5. It is not tiresome, as minuals or handbooks generally are, but on the contrary it is very interesting. As the author says, in his preface to the ninth edition: "Since the last edition of this work was published, a most important event has taken place in this country. We allude to the establishment of the apostolic delegation. . . Hence we have thought it opportune to set forth in this new edition . . . the origin and history of apostolic delegations; their various kinds; their powers and prerogatives; their support and maintenance; the recall, resignation, etc., of apostolic delegates, auditors and secretaries; and the office of the auditor, and of the secretary of the apostolic delegation.'

This edition also contains a very important decision of the S. C. de Prop. Fide in regard to ecclesiastics assigning to laics pecuniary claims against other ecclesiastics, for the purpose of bringing suit in the secular court for the recovery of the claim.

In addition, the author has more accurately defined the powers of the College of Cardinals during the vacancy of the Papal chair.

The information which this edition contains on apostolic delegations is full, clear and timely, and it is valuable for all the faithful—laity, priests, and bishops. The silly blunders that are continually being made by otherwise well-informed journals when speaking of the apos-

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tolic delegate, and the ridiculously false assumptions of the numerous correspondents who think they know it all, move us to say to them: Buy a book.

THE BLESSED VIRGIN IN THE FATHERS OF THE FIRST SIX CENTURIES. By Thomas Livius, C SS.R., with a preface by His Eminence, the Cardinal Archbishop of Westminster. London: Burns & Oates. New York: Benziger Brothers. 1893

"Whatever value may be attached to this work," says the learned author, " is due entirely to the numerous patristic extracts which it contains. It has not been my general aim in it to prove or expound the various points of Catholic doctrine regarding Our Lady, which form the subject-matter of the several chapters; but rather simply to show what were the views and teachings of the Fathers on them, and to produce their own words in witness. Hence the quotations from the Fathers should be looked upon as the principal part of this work, and what I have written of my own as but accessory." In other words, Father Livius has here done for Mary that which he had so successfully accomplished for St. Peter; he has by means of copious and lengthy extracts from the writings of the Fathers enabled the English reader to judge for himself what were the sentiments of the early Church. Hence his goodly-sized volume is destined to become what His Eminence of Westminster prophesies, "a standard book of reference." In thirteen chapters he allows the Fathers to give their views on "Mary as the second Eve," on her sanctity, her sinlessness, her virginity, her analogy to the Church, her intercessory power and the miracles and graces obtained through invoking her. The second chapter, concerning her place in patristic exegesis of Scripture, evinces wide and careful reading. wisely, the author has placed St. Ephrem apart by himself, a just tribute to the exceptional merit of that great servant of the Mother of God. In four introductory chapters, the author has given a lucid exposition of the doctrine of development, carefully distinguishing between accretive development, or new revelations, which ceased with the first promulgation of the Gospels, and non-accretive development, which is a clearer understanding of the full bearing and consectaries of the truths once revealed to the Church, and which can never cease, so long as the Church (to use Cardinal Vaughan's words) "like Mary in the Gospel, is ever pondering in her heart over the things she has heard."

But it would not be right to take the author's modest estimate of his labors too literally. His work is far more than a catena of patristic texts. His marshalling of witnesses displays remarkable skill; and his introductory remarks are replete with learning and wisdom. We join with Cardinal Vaughan in thanking the disciple of St. Liguori and in trusting that his book "will meet with the cordial reception which it deserves from devout Catholics, on the one hand, and from sincere and

earnest inquirers outside the Church, on the other."

MANAGEMENT OF CHRISTIAN SCHOOLS, By the Brothers of the Christian Schools, New York: P. O. Shea, Publisher. 1893.

The above little work is an essay drawn up for the use of schools under the management of the Christian Brothers. The object of the work, the preface tells us, is, "first, to determine and specify the method and system to be followed in schools taught by the Christian Brothers; and, second, to enable the teachers to become acquainted with methods which, having stood the test of experience, may be advantageously used in the discharge of their duties." The publication of this little work is timely, and will, we are sure, meet with general approbation. The work of the Christian Brother in the field of education has been splendid and far-reaching, and great good therefore must result from the publication of a system which has been the instrument of such splendid achievements. Though old, formulated as it was so long ago by the saintly founder of the Christian Brotherhood, the system of education as explained in the present work and carried out in daily practice in the school-room is abreast of the latest methods of modern times. As with the systems of education used in other schools, so the system used by the Christian Brother has discarded the old lines that sought chiefly the cultivation of the memory and makes use of methods chiefly calculated to exercise the understanding and lead the child to reflect and reason upon facts. This, it is now very generally admitted, is the truest and best system. The wonder is that long ere these times men did not see this,

Apart from the explanation of the Christian Brothers' system of education and method of instruction, the little book before us is valuable for the direction and guidance it gives to the teacher. This we hold to be a very important feature in the work of education. A teacher's deportment and bearing is a very prominent factor in the work of instruction, a factor, indeed, to which the greatest concern and care should be given. Together with the imparting of knowledge, the teacher is ever, consciously or unconsciously, forming character. His example, his bearing, his words and deeds are ever shaping and moulding the minds and hearts around him. Hence the importance of care and of right views and high standards in that regard.

To all those, then, who are interested in the work of education, and to those especially who are wedded to the noble work of instruction, we heartily commend this little book. It may tell them nothing that is new, but its thoughtful suggestions and high standards cannot fail to do them good.

SATURDAY DEDICATED TO MARY. From the Italian of Father Cabrini, S. J. With Preface and Introduction by Father Clarke, S. J. London: Burns & Oates, Limited. 1893.

Though misleading, if the title given to this book be instrumental in inducing others, as was the case with the reviewer, to secure it, we are sure they will never regret it. When first our eye fell upon the title we fancied the work a dry and long drawn out disquisition on the origin of and reasons for the dedication of Saturday to the Blessed Virgin. We were, however, on opening its pages, agreeably surprised to find our thoughts at fault. We found the book not a dry and prolonged essay on the origin of and reasons for the dedication of Saturday to the Blessed Virgin, but a fresh and delightful devotional work on the Blessed Mother.

In saying that we were agreeably surprised to find that the title of this book had misled us, we do not mean to cast disparagement upon, much less to discourage or undervalue, studies and works of the nature indicated or implied by the title. To such studies we all should give our heartiest and most practical approval and encouragement. They are indeed worthy of highest commendation, resulting, as in most cases they do, in new incentives to devotion and new reasons for faith and love. The agreeableness of our surprise arose rather from the unusual excellence of the devotional work than from a direct and positive dislike for a subject implied by the title. In his introduction to the work, Father

Clarke gives what we consider a very reasonable explanation of the dedication of Saturday to the Blessed Virgin. Citing other reasons and explanations given by most eminent and most pious writers, he holds and sustains his opinion by strong authorities; that as Friday was already occupied by considerations of the Sacred Passion of Jesus, the devotion of the faithful to the sufferings of His Holy Mother because of that Passion was naturally transferred to the following day.

We commend this book, on devotion to the Blessed Mother, to both clergy and laity. It has a freshness and originality of treatment that must appeal to the delight of all Catholics. The author divides the work into fifty-two considerations, as he calls them. Each consideration is in reality a sermon with three points, and will, we are sure, be greatly prized by our clergy, who will find in these considerations, with slight development, rich material for their instructions to the people.

THE CHRISTIAN'S LAST END; OR, SERMONS ON THE FOUR LAST THINGS: DEATH, JUDGMENT, HELL, AND HEAVEN. In seventy-six Sermons, adapted to all the Sundays and most of the Holy Days of the year, with a full index of all the sermons, an alphabetical index of the principal subjects treated, and copious marginal notes. By the Rev. Father Francis Hunolt, Priest of the Society of Jesus, and Preacher in the Cathedral of Treves. Translated from the original German edition of Cologne, 1740, by the Rev. J. Allen, D.D., Missionary Priest, Queenstown, South Africa. Vol. I, and II. Benziger Bros., Printers to the Holy Apostolic Sec. 1893.

There are, we feel sure, very few priests who have not in their libraries, and within easy reach of their desk, the preceding volumes of Father Hunolt's great work, as given us in their English translation by Dr. Allen. That "The Christian's Last End," the ninth and tenth volumes of the series, will meet with a generous and general welcome, we are firmly convinced. The subject-matter-Death, Judgment, Hell, and Heaven—the great foundations and truths of Christianity, is of intensest interest and first importance. And where nowadays are those questions treated as in the sermons of Father Hunolt? We do not claim for them, for to such things they make no pretension, elegance of diction or ornateness of style; they do not appeal to the ear by the rhythm and stateliness of their sentences, but have they not that which is far more excellent? Where a simplicity of statement, a depth, a liveliness of faith, an unction, a fervor of piety, as in these sermons? In these days of fastidious delicacy, when skepticism has become fashionable. when the very names of hell and judgment have been relegated to the background, when even in the Christian pulpit there is so much trimming, so much cowardice, it does one good to meet their like. They preach Christ. They reach out for the salvation of souls. You feel there is conviction and sincerity back of them, and you are touched and moved. These are the sermons that go to the heart of man and raise him from sin and inspire him to do and dare great things for God. We commend them to priest and people. To both they will prove a wondrous treasure.

MEDITATIONS AND DEVOTIONS OF THE LATE CARDINAL NEWMAN. New York and London: Longmans, Green & Co. 1893.

The publication of this volume will surprise not a few persons. It is a revelation of a side of Cardinal Newman's character of which the public generally knew very little. They knew him as an acute and profound thinker, as a learned controversialist and historian, and as an ascetic and pious ecclesiastic; but only those who knew him most intimately, most interiorly, we may say, knew that even when seemingly he

was entirely engrossed with other occupations and studies, he was de-

voutly meditating and praying.

Yet such was the fact, as numerous papers of his, mostly incomplete and fragmentary, clearly show. The volume before us is made up of those of his prayers and meditations which he had fully written out. That they are of superior merit goes without saying. Every one who knows anything about Cardinal Newman knows that this could scarcely fail to be true of everything he wrote.

It only remains for us to briefly recount the contents of this incomparable work. Part first contains Meditations on the Litany of Loretto, for the month of May, a Memorandum of the Immaculate Conception, which for simplicity of argument and lucidity of reasoning is unsurpassable; a Noneva of St. Philip, and a Litany of St. Philip. Part second contains Meditations on the Stations of the Cross; Meditations for Good Friday; a Prayer for the Faithful Departed, and Litanies, respectively of Penance, the Passion, the Seven Dolors, the Resurrection, the Immaculate Heart of Mary, the Holy Name of Mary, of St. Philip (in English and in Latin), and an admirable translation of "Anima Christi"; a short service for Rosary Sunday, and a number of Meditations on different subjects, and of Prayers for different purposes. Part third consists of twenty-three Meditations on Christian Doctrine, and a concluding paper written by Cardinal Newman in prospect of death.

FROM THE HIGHWAYS OF LIFE. New York: The Columbus Press, 1893.

The purpose of this little volume is to show how converts are made. The purpose is well carried into effect. There are accounts of all kinds of converts who differed widely from one another in their dissent from the Catholic faith, who approached it from different directions, and from all sections of the regions of doubt and error; they were, severally, Jews, "Anglo-Catholics" or Ritualist High Church Episcopalians, Low Churchmen, Presbyterians, Congregationalists, Unitarians, Baptists, Methodists, white people and colored people, of various characters, pursuits and positions in society.

The accounts of these conversions, the compiler assumes us in his preface, are authentic, both in fact and in authority. Each one of the accounts was written by the convert himself or herself, except a few which were written by friends at the request of the converts. With one exception, the subjects of these narratives are not our most distinguished converts nor are they from the ranks of the uneducated and ignorant. There is little of controversy and didactic teaching in these sketches. They are more like narratives of explorers and travellers, for they tell of the journeys of the converts on the byways and highways that lead to truth.

The reader will note that the heroic part of the progress of these converts towards the truth and their final acceptance of it, was not so much repugnance to the faith itself, as in surmounting difficulties of a personal nature, such as alienation from family and dearly loved kindred and friends. In this respect, as in other respects, the experience of these converts do not materially differ from those of most other converts.

The book is not only interesting, but valuable to Catholics, by showing through a number of practical object-lessons how to help men and women into the Church. It is shown the invincible influence of soul upon soul in propagating the truth—a burning word, a generous sacrifice, a noble life.

JOHN SEBASTIAN CABOT; Biographical Notice, with Documents. By Francesco Torducci. Translated from the Italian by Henry F. Brownson, Detroit: H. F. Brownson, Publisher. 1893.

It was a happy thought that led Dr. Brownson to translate and publish Torducci's work on John and Sebastian Cabot; for, as discoverers, the two Cabots rank above all others except Columbus. Torducci, indeed, in some respects places them along side of, if not above Columbus. He says that John Cabot preceded Columbus in the attempt at transatlantic discovery, and that although San Salvador was discovered nearly two years before Cabot discovered those parts of North America which subsequently England took possession of, yet Cabot would have succeeded had Columbus never lived.

But this in reality amounts to nothing. John Cabot preceded Columbus in the attempt at transatlantic discovery, but his attempt was fruit-Moreover, Cabot preceded Columbus because Columbus was prevented for many years, by want of sufficient means, from entering upon the realization of his scheme. Otherwise Columbus would have preceded Cabot in the attempt at discovery, as he did precede him in planning the attempt. To say that had Columbus never lived, Cabot or some one else would have made the discoveries Columbus made—is true; but it is childish thus to reason. As well say that if Sir Isaac Newton had not made the notable scientific discoveries he did make. some one else would have made them.

As for the work itself, it shows the same painstaking collection of materials, and the same carefully discriminating, judicious employment of them, that characterize the author's work on Columbus.

CATHOLIC SCIENCE AND CATHOLIC SCIENTISTS. By the Rev. J. A. Zohm, C.S.C.,
Professor of Physics in the University of Notre Dame. Philadelphia: H. L. Kilner & Co. 1893.

This work is composed of articles, revised and enlarged, which originally appeared in the American Catholic Quarterly Review and in the Ave Maria. Its object is to show the relation of the Church to science; that there is not, and cannot be, a conflict between real science and true religion, and that those who have been guided by the light of faith and Christian philosophy are precisely those who have been most successful in the pursuit of knowledge and have contributed most towards securing valuable results in every department of science.

This purpose the learned writer successfully accomplishes in the four chapters or papers which make up the volume, and which are respectively entitled "Science and the Church," "Catholic Scientists and their Achievements," "Catholic Dogma and Scientific Dogmatism," "The Friends and the Foes of Science."

MORALPHILOSOPHIE. Eine wissenschaftliche Darlegung der sittlichen, einschliesslich der rechtlichen, Ordunug: von Victor Cathrein, S. J. Second enlarged and revised edition. B. Herder: Freiburg and St. Louis. Two volumes in large octavo. Price, \$5.85 net.

We congratulate the learned Jesuit and the cause of Christian ethics upon the remarkable success of this great work, as evidenced not only by the fact that the first edition, issued in 1890, has been so speedily exhausted, but yet more by the universal applause of the Catholic world and the expressions of bitter enmity evoked from unchristian moralists. At the first appearance of the volumes, the Catholics recognized that a new and powerful champion of religion had arisen among them; one who, planting himself firmly on the "wisdom of St. Thomas," was furthermore thoroughly acquainted with the living questions of the hour, and able to apply the ancient truths to the solution of modern problems. Those so called philosophers, on the other hand, who amuse themselves by undertaking to "make bricks without straw," viz., to build up a system of ethics to the exclusion of God and religion, have been extremely restive under the inexorable lash of the author's logic, which has taken them nominatim, and exposed the futility of their dreams. The numerous alterations and additions made in this second edition are all in a line with the author's main object of following up the sophisms of irreligious teachers and exposing the fallacy of their ethical theories. We can only repeat a wish, often expressed by us when dealing with Herder's valuable publications, that the treatise may be speedily translated for the benefit of English readers.

MAGISTER CHORALIS. A Theoretical and Practical Manual of Gregorian Chant for the use of the Clergy, Seminarists, Organists. Choir Masters, etc. By Rev. Dr. F. X. Haberl, Director of Church Music School Ratisbon, editor of the complete works of Palestrina, etc Second (English) edition, translated from the ninth German edition by Most Rev. Dr. Donnelly, Bishop of Canca, Vicar General of Dublin. Ratisbon, New York and Cincinnati, Fr. Pustet, 1892. London: Burns & Oates.

With the former English edition of this work issued about ten years ago, ecclesiastics generally are familiar. We do not hesitate to say that the present edition, taken from the improved ninth German edition, will give more satisfaction, and for the reason chiefly that the translator has adhered more faithfully to the German original. The order of compilation and treatment is about the same as in the first edition. Beginning with a history of plain chant, the author divides the work into three parts.

In the first part he treats of sounds, intervals, notes, clefs, rhythm, pronunciation, and those other elementary principles whose knowledge is essentially necessary to success in music. In the second part the author treats first, of the nature of the old Gregorian modes, their employment in simple choral chant; and secondly of the Church calendar, of the arrangement and use of the several liturgical books and of the domain of Catholic Gregorian church music in general. The third part of the work the author devotes to general considerations and principles for the execution of plain chant and an inquiry into its spirit and intimate connection with Divine worship.

Brendaniana, St. Brendan the Voyager in Story and Legend. By the Rev. Denis O'Donoghue, P.P., Adfert. Dublin: Browne & Nolan, 24 and 25 Nassau Street. 1893.

It is a great pity that so little, in a postive authentic way, is known of St. Brendan. Of his birth and early life we have exact knowledge. We know that he became a most holy man, founded schools and monasteries in his native land, and, filled with the Apostolic spirit, went forth to other countries and spread the Gospel among their inhabitants. But of his voyages by sea, of the lands he visited and the peoples he met we have little more than story and legend. That the saint found his way to America is not improbable. It were rash, we hold, to deny it, though at present we have no positive proofs to bear out the opinion. The future no doubt will throw light upon that early period of the Christian era. For centuries it was unknown that the Northmen had discovered

Greenland in the tenth century, and not until the early years of the present century was that fact made known. So too we trust will the future historian be able to do justice to the labors and sacrifices of Brendan. Whilst furnishing nothing, in a positive way, that is new to the scholar and general reader, "Brendaniana" will, we are sure, give delight to thousands of hearts in the old land by its portrayal of the local labors and life of the saint. To many, moreover, its pages on "Vestiges of Prehistoric Settlements and Missions" will be both interesting and instructive.

MEMOIRS OF CHAPLAIN LIFE, By Very Rev. W. Corby, C.S.C. Chicago: Lamonte, McDonnell & Co. 1893.

A member of the Faculty of Notre Dame University. Indiana, has in these memoirs produced one of the most interesting records of personal experience that we have met with for a long time. For three years chaplain of the famous Irish Brigade of the Army of the Potomac, he had an exceptional opportunity to take notes of his adventures and experiences which have enabled him to give, nearly thirty years after the close of the war, a vivid and life-like narrative of some of the most thrilling incidents in our great internecine struggle. Father Corby has succeeded admirably in giving a realistic account of every-day life in the army, and has recorded, chronologically, incidents exactly as they occurred under his notice, without tedious prolixity of detail. Besides his own experiences he gives those of fellow-chaplains and others, in reference to which he says:

"I give a valuable account, written by Father Egan, of his own experiences and labors. Finally, an able article from the gifted pen of my friend and 'companion-in-arms,' Major-General St. Clair A. Mulholand, of Philadelphia, recounts the chivalry of the soldiers, and especially of the Irish soldiers, who won imperishable glory in the defense of right on innumerable battlefields."

His object in presenting this book to the public has been, he says, "to show the religious feature that existed in the army. In the presence of death religion gives hope and strength. The Christian soldier realizes that his power comes from the 'God of Battles,' not from man."

DONN PIATT; HIS WORK AND HIS WAYS. By Charles Grant Miller.

POEMS AND PLAYS. By Donn Piatt.

SUNDAY MEDITATIONS AND SELECTED PROSE SKETCHES. By Donn Piatt. Cincin nati: Robert Clark & Co. 1893.

It is well to record the life and preserve the literary remains of men whose life and labors have had a lasting influence for good on their country. Such was certainly the fortune of Donn Piatt, the son of a pioneer lawyer and judge in Ohio, who had become a convert to Catholicity in 1820, though his son's life was not without its storms and shadows. It was necessarily so at times, for his lot was cast among scenes of great political turmoil and confusion, the strife of civil war and official corruption in high places. The story is told sympathetically and interestingly from his birth in a pioneer home until his edifying death in the bosom of the Catholic faith.

Some of the best literary efforts are preserved in the two volumes of remains, though combined with them are other productions by no means so meritorious. It would have been better had the introductory essay of the "Sunday Meditations," which we take to be the editor's, been

omitted, it being only a tirade against common school education and the pretentions of science. In regard to the latter subject, indeed, it contains at least one proposition that has been formally condemned by the Church.

THE LIFE OF ST. PETER CLAVER, S.J., THE APOSTLE OF THE NATIONS. Edited by a Father of St. Joseph's Society. Philadelphia: H. L. Kilner & Co.

In the history of the Church we read of heroic souls giving themselves as slaves in exchange for Christian captives, but Peter Claver's task was different. He was on the Western Continent when the accursed slave traffic was prosecuted with utmost vigor and with relentless cruelty. His mission was to these poor slaves. Surely it was a unique vocation. No sympathy, no encouragement were his; nothing but open hostility or ill-disguised contempt. For forty years he labored among the slaves, consoling and instructing them teaching, them patience, fortitude, forgiveness of their cruel oppressors, converting them to the true faith. His labors and his success were marvellous, and his miracles were stupendous.

The story of his life and labors, of his success, his miracles, his sanctity, his death, are well told in the volume before us.

RELIGIOUS PROBLEMS OF THE NINETEENTH CENTURY. Essays by Aubrey de Vere, LL.D. Edited by J. G. Wenham, London: St. Anselm's Society. New York, Cincinnati, Chicago: Benziger Brothers. 1893.

The first three of the essays contained in this volume are selected from Mr. de Vere's Essays in three vols., published by Messrs. Macmillan; the last two originally appeared in the *Dublin Review*. The subjects discussed are those with which our own times are most immediately and profoundly concerned. They are treated with a thoroughness and completeness that must powerfully appeal to the right reason and good sense of those who are troubled with honest doubts and real difficulties. They go to the root of the matters discussed; and, if read with care, can scarcely fail to enlarge the minds and enlighten the eyes of many who do not wish to be unbelievers, yet are drifting about in the waters of speculation, not knowing which way to go, or what to do.

LETTE'S AND WRITINGS OF MARIE LATASH; Lay Sister of the Congregation of the Sacred Heart. With Critical and Expository Notes. By two Fathers of the Society of Jesus. Translated from the French by Edward Heaiy Thompson, M.A. Vol. II. London: Burns & Oates, Limited. New York, Cincinnati, Chicago: Benziger Bros.

From more than one point of view this is a peculiar book, and calculated to attract attention. Its contents, it is claimed, were made known to the writer by our Lord Himself. Be that as it may, they are worthy of perusal and study for their own sake, for their wholesomeness, and the deep, abiding faith of the writer.

The chapters on "Grace," on "Sin," and the "Four Last Things" we found particularly interesting and instructive.

THE LABORS OF THE APOSTLES: THEIR TEACHING OF THE NATIONS. By the Right Rev Louis de Goesbriand, D.D., Bishop of Burlington. New York, Cincinnati: Benziger Brothers. 1893.

After a brief chapter describing the public life of our Divine Lord, the author points out the means which the Blessed Redeemer appointed

for perpetuating and disseminating His doctrine. Then the author shows how the New Testament came to be written, the progress made by the gospel, the mission and labors of St. Paul, the Apostolate of St. Peter, his office as Head of the Church, and then traces out the labors of the other Apostles.

The work is a valuable contribution to the literature already existing

on these subjects.

THE WITNESS OF THE SAINTS; OR, THE SAINTS AND THE CHURCH. By Henry Sebastian Bourden London: Burns and Oates. New York, Cincinnati and Chicago: Benziger Brothers. 1893.

This book is a reprint of a "Popular Introduction" to an edition of Butler's "Lives of the Saints," which is now being issued in numbers by Messrs. Virtue & Co., of London, England. In five successive chapters the author shows that the saints are our teachers, that they are champions of unity, examples of holiness, pledges of Catholicity, and heirs of the Apostles. The treatment of the several subjects is judicious; the examples cited and the incidents narrated are well calculated to illustrate and enforce the author's statements,

PLAIN PRACTICAL SERMONS By Rev. John A. Sheppard, A.M. Fr. Pustet, Printer to the Holy See and the Sacred Congregation of Rites. New York and Cincinnati; Fr. Pustet & Co., 1893.

After a careful reading we pronounce these sermons just what the author claims for them; they are plain, practical sermons, instructive and convincing. Here and there we could wish for more directness of treatment, perhaps a little more simplicity, but taking them all in all, they are solid thoughtful sermons.

We trust that Father Sheppard will go on in this field, and soon again give us in a new series of sermons the fruits of his labors.

A LADY. MANNERS AND SOCIAL USAGES. By Lelia Hardin Bugg, Author of "The Correct Thing for Catholics." New York, Cincinnati, Chicago: Benziger Brothers, 1893.

There is no other country in the world where there are so many persons asking what it is proper to do, and where there are so many who are sincerely anx ous to do the proper thing, as in the United States. To all these, this little book will be invaluable. Its suggestions and directions are sound, judicious, and sensible. Every one who follows them will be, so far at least as manners and external behavior go, a true lady.

"AS THE BISHOP SAW IT" FROM AMERICA TO ROME. Edited by Very Rev. Frank A O'Brien. Pauly, Fuchs & Co.: Detroit, Mich.

This book consists of letters written by the Right Rev. C. H. Borgess, D.D., late Bishop of Detroit, describing what he saw in Rome, and also in other places in Italy, Switzerland, Germany, Holland, Belgium, France, England, and Ireland, during an extensive tour through those countries. The letters are just what the title of the work suggests—chatty, lively, interesting descriptions of what the Bishop saw in the different places he visited.

THE DAYSPRING FROM ON HIGH. Selections arranged by Emma Forbes Carey. Boston: Houghton, Mifflin & Co. 1893.

These selections for every day in the year are made from the Sacred Scriptures, and the productions, both in poetry and prose, of many dif-



ferent distinguished writers. In making her selections, the author has exercised great care and discrimination. The result is an interesting and instructive volume, and one which may be daily consulted with interest and profit.

TABULÆ SYSTEMATICÆ ET SYNOPTICÆ TOTIUS SUMMÆ THEOLOGICÆ JUXTA IPSAM-MET DOCTORIS ANGELIC: METHODUM STRICTIUS ET CLARIUS EXACTÆ. By P. J. J. Berthier, Editio Altera. Friburgi Helvetionum, Sumptibus Veith Bibliopolæ Universitatis. 1893.

This will be a welcome publication to all students of St. Thomas. To the student entering on the study of the Angelic Doctor it must prove the greatest assistance; whilst to those who have become familiar with the writings of the Saint, it will be invaluable, calculated as it is to fix in the memory the matter gone over.

SHORT SERMONS ON THE EPISTLES FOR EVERY SUNDAY IN THE YEAR. By The Very Kev. N. M. Redmond, V.F. 1893. Fr. Pustet, Printer to the Apostolic See and the Sacred Congregation of Rites. Fr. Pustet & Co. New York and Cincinnati.

Excellent little sermons! That was our verdict on closing the above book after a careful perusal of its contents. They are the sermons, plain, direct and eminently practical, we should like to see in the hands of the people. They are brief, perhaps too much so in the minds of some, but they nevertheless contain a great deal. We like them greatly.

CHRIST IN TYPE AND IN PROPHECY. By Rev. A. J. Maas, S. J., Professor of Oriental Languages in Woodstock College, Md New York, Cincinnati, Chicago: Benziger Brothers. 1893.

This work has reached us too late for careful examination and notice; and both the importance of the subjects treated and the distinguished reputation of the author for learning and ability forbid any other kind of notice. We hope to do justice to its merits in the next number of the Review.

WHY, WHEN, HOW, AND WHAT WE OUGHT TO READ. By Rev. J. L. O'Neil, O.P. Boston: Thomas B. Noonan & Co. 1893.

A really admirable book, and one which every young person ought to have, and read. Indeed, its suggestions are not only useful to the young, but even scholars of mature age may obtain from it profitable instruction.

AN EXPLANATION OF THE GOSPELS OF THE SUNDAYS AND HOLY-DAYS. From the Italian of Angelo Cagnola by Rev. L. A. Lambert, LL.D. Together with an Explanation of Catholic Worshp, its Ceremonies, and the Festivals of the Church. From the German by Rev. Richard Brennan, LL.D. With 32 illustrations, New York, Cincinnati, Chicago: Benziger Brothers. 1893.

This is one of the most useful and instructive books on the subjects mentioned on its title page that we know of.

THE RELIGION OF SCIENCE. By Dr. Paul de Corus. Chicago: The Open Court Publishing Society.

This is a pretentious little volume, thoroughly sophistical and false from beginning to end.

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Breviarum Romanum: Ex decreto SS. Conc. Trid., etc. Four vols., 18 mo. Fifth edition. Ratisbon, New York and Cincinnati: F. Pustet.

A very convenient edition of the breviary, containing all the latest offices, with legible type, and, owing to the lightness of the paper on which it is printed, each volume weighing less than a pound.

God's Birds. By John Priestman. London: Burns & Oates, Limited. New York, Cincinnati, Chicago: Benziger Brothers.

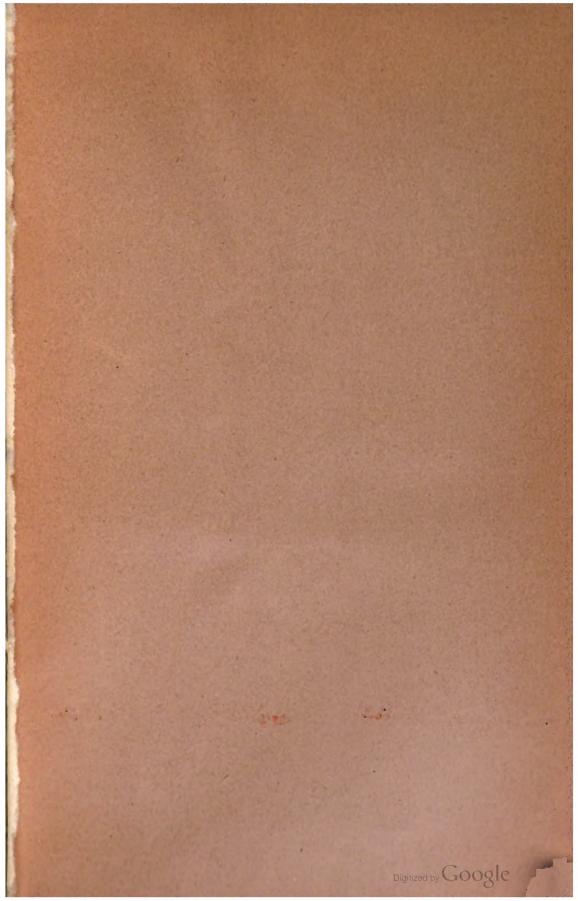
The birds which are treated in this book under the name of "God's Birds," are the birds mentioned in the Bible. The work is both instructive and interesting.

AN OCTAVE TO MARY. By John B. Tabb. Baltimore: John Murphy & Co.

This volume (which as regards its paper, letter-press, and binding is a work "de luxe") consists of a number of devout meditations in verse on the Ever Blessed Virgin Mary.

BOOKS RECEIVED.

- THE SCIENCE OF MECHANICS. A Critical and Historical Exposition of its Principles, By Dr. Earnest Mach, Professor of Physics in the University of Prague. Translated from the Second German Edition by Thomas J. McCormac. Chicago: The Open Court Publishing Company. 1893.
- THE FLIGHT INTO EGYPT. From the Meditations of Sister Anne Catherine Emmerich.
 Translated from the French by George Richardson. London: Burns & Oates. New York, Cincinnati, Chicago: Benziger Brothers.
- THE MONTH OF THE HOLY ANGELS, St. Francis de Sales. From the French, Approved by His Eminence, Cardinal Gibbons. New York, Cincinnati, Chicago: Benziger Brothers. 1893.
- GOLDEN PRAYERS. Containing the Ordinary of the Mass, Vespers, Benediction of the Most Blessed Sacrament, etc., etc. New York, Cincinnati, and Chicago: Benziger Brothers. 1893.
- FROM LA RABIDA TO SAN SALVADOR. A Drama in Four Acts. By a member of the Congregation of the Sisters of the Holy Cross. Notre Dame, Ind.: Office of the "Ave Marie."
- AN EXAMINATION OF WEISMANNISM. By George John Romanes, M. A., LL.D., F. R. S. Chicago: The Open Court Publishing Company, 1893.
- IN DREAMLAND, AND OTHER POEMS. By Thomas O'Hugan. Toronto: The Williamson Book Company. 1893.
- LA RABIDA. A California Columbian Souvenir Poem. By Mary Lambert.
- FIRST PRAYERS FOR CHILDREN, New York: Benziger Brothers.



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